

Florida

Smallest Big Game Animal
The American Eel

Fishing • Hunting
• Conservation •
Outdoor Recreation

WILDLIFE

JANUARY 1969

The Florida Magazine for all Sportsmen

25 CENTS



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Florida Wildlife Scrapbook

BIG THREE OF THE FLORIDA OWL FAMILY

**BARRED
OWL**



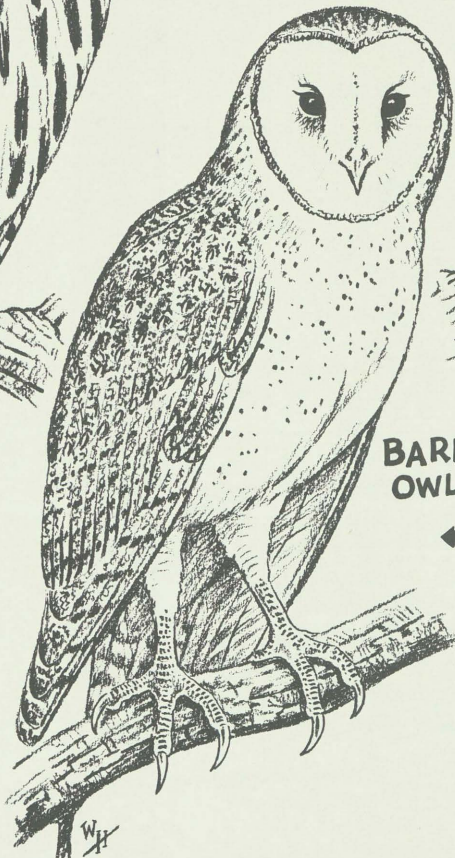
▲
NEXT IN SIZE TO THE
HORNED OWL • LENGTH
TO 24 INCHES, WINGSPREAD
TO 50 INCHES • INHABITS
DEEP FORESTS, PRAIRIE
HAMMOCKS AND WOODS CLOSE
TO TOWNS IN ALL SECTIONS
OF THE STATE • TAME AND
LESS SECRETIVE THAN OTHER
FLORIDA OWLS • BROWN EYES,
NO EAR TUFTS • VOICE -
NEARLY ALWAYS A SERIES
OF 8 HOOTS ENDING WITH "AW"

▶
LARGEST FLORIDA OWL
• LENGTH TO 25 INCHES
WITH WINGSPREAD UP
TO 60 INCHES • LIVES
IN ALL PARTS OF THE
STATE IN PINE WOODS,
SWAMP FORESTS, PRAIRIE
HAMMOCKS AND WOODS
BORDERING MARSHES •
HAS FIERCE YELLOW
EYES AND IS THE ONLY
LARGE OWL WITH EAR
TUFTS OR "HORNS" •
VOICE - 4 TO 7 HOOTS
NOT ENDING WITH "AW"

**HORNED
OWL**



**BARN
OWL**



◀
AS ITS NAME IMPLIES OFTEN LIVES
IN OLD BARNs - WHEN AVAILABLE, OR
ABANDONED HOUSES, CHURCH STEEPLES
AND CAVITIES IN TREES • A RESIDENT
THRUOUT THE STATE • A BEAUTIFUL
OWL WITH GOLDEN, BUFF FEATHERS
AND DARK BROWN EYES • LENGTH
TO 21 INCHES, WINGSPREAD 43 INCHES
• BENEFICIAL BIRDS FEEDING MAINLY
ON RATS AND MICE, OWLS ARE PRO-
TECTED BY STATE LAW • DON'T SHOOT

Florida WILDLIFE

JANUARY 1969

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State of Florida

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In This Issue

Smallest Big Game Animal	Charles Waterman	12
The American Eel	Art Hutt	18
Screech Owl	Gene Smith	22
Isle of History	John Fix	24
Who Owns The Game?	Ernest Swift	27

Departments

Wildlife Officer Notes	4
Fishing	5
Boating	9
Hunting	29
Conservation Scene	32

The Cover

With tufts of feathers atop their head, the Screech Owl appears to have ears or horns. In the eastern part of the country they (either sex) appear in two different colors—reddish brown or gray. See page 22.

From A Painting By Wallace Hughes

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Wildlife Officer Notes

THE TREND IS to heavier penalties for those convicted of violating Florida's game and fish laws, according to Major Brantley Goodson, Chief, Law Enforcement Division, Game and Fresh Water Fish Commission, Tallahassee.

"A glance at some of the 1968 newspaper headlines from around the state reflects a healthy sign of growing concern on the part of the people and the courts for protection of our wildlife resources against the game thief," says Goodson.

Here are a few samples: "Stiff Sentences Ordered For Game Law Violators"—"Avon Park Man Gets Jail For Killing Deer" (in July)—"Poachers Finding Judge Unrelenting"—"Poaching Crackdown Urged."

Under the "Stiff Sentences" headline was a story out of Ocala telling of four Winter Garden men convicted in August of night hunting in the Ocala National Forest in Marion County. Each was sentenced to 30 days at hard labor plus a \$200 fine or 30 additional days on charges of possessing a freshly killed deer. Each received an identical sentence for possession of a gun and light in a national forest, plus another 30 days each for having a gun in a wildlife management area.

But the judge wasn't finished even then. Each of the defendants' right to hunt was revoked for a year.

The second headline referred to a similar case in which an Avon Park man received 30 days in jail and a \$250 fine and had his automobile and gun seized. He killed a deer in mid-July by use of a gun and light at night, was caught by a wildlife officer, admitted his guilt to the court, and served his sentence.

Another unrelenting judge slapped a \$400 fine on a Tallahassee man in September for possession of a doe deer he tried to sneak out of the Wakulla County woods after changing vehicles once and cruising past the hidden deer a number of times "to assure that no one was in the area."

What he didn't know was that concerned citizens had notified officers of the deer hanging in the woods, and that they were there awaiting his return to make the pickup.

Besides the fine the defendant had to pay, his car and a firearm were seized in accordance with Florida law.

"Higher fines and mandatory jail terms are being recorded in all parts of the state—for alligator hunting, illegal fishing, selling fish and game, night hunting and similar violations," says Goodson. "Strict law enforcement and tougher penalties upon conviction should deter any reasonable person from committing overt violations of the wildlife laws."

ARREST REPORT

July 1, 1968 through November 30, 1968

Hunting Violations

License & Management Area Permits	226
Night Hunting, Gun and Light	129
Illegal Deer or Turkey Hunting	43
Illegal Quail or Squirrel Hunting	49
Alligator Hunting or Possession of Hides . . .	45
Migratory Bird or Waterfowl	254
Other Protected Animals (bear, wild hog, otter, etc.)	31
Miscellaneous (guns in management areas during closed season, unplugged guns, shooting before & after legal hours, etc) . .	264
	<u>1,041</u>

Fishing Violations

Fishing License	625
Illegal Taking of Fresh Water Fish	39
Illegal Transportation and Selling	23
Over Bag Limit	13
Fishing in Closed Areas (miscellaneous) . . .	15
	<u>715</u>

Boating Safety Violations

Equipment (lifesaving devices)	140
Registration	75
Operations	34
	<u>249</u>

TOTAL ARRESTS 2,005

VETERAN FLORIDA wildlife officer W. R. "Mack" Hodges, 66, of Gulf Hammock, retired from duty in September after 20 years with the Game and Fresh Water Fish Commission.

Hodges was employed as a wildlife officer in the Law Enforcement Division in 1948 but transferred to Game Management Division after about a year. He worked as a game management specialist on the Gulf Hammock Wildlife Management Area in Levy County until 1957, when he returned to Law Enforcement Division.

In announcing Hodge's retirement, Major Brantley Goodson, Chief of Law Enforcement Division, Tallahassee, said, "The Commission and the people of Florida owe a tremendous debt of gratitude to men like Mack Hodges; men who have served the cause of wildlife conservation long and faithfully. Employees like Mack don't come along every day."

TWO PAPERS WERE presented by Commission Law Enforcement staff officers at the Southeastern Association of Game and Fish Commissioners conference, held in Baltimore in October. They were:

"The Anti-Gun Movement and Its Possible Effect on Wildlife Conservation" by Captain David E. Swindell, Assistant Chief of Law Enforcement and Personnel Officer; and "Some General Aspects of Human Motivation" by Major Brantley Goodson, Chief, Law Enforcement Division. ●

Fishing Changes

FISHING

it is time to get ready for early spring fishing during the largemouth bass spawning season—and river shad fishing that is already underway

By CHARLES WATERMAN



ONLY CLOSE observation and persistence will give you consistent results in fishing for spawning and pre-spawning bass.

In some areas spawning beds are easily located, being in very shallow water and well cleared out into light patches, and some fishermen feel that's the only kind of water in which they can take advantage of Mama and Papa Bigmouth during the egg season.

But the spawning program includes heavy feeding before the eggs are actually deposited, and pre-spawners can be caught some distance from the eventual nests. Nearby grass flats are likely to hold extra fish as spawning time approaches. In central and south Florida the spawning influence is strongly felt from around January 1, to sometime in April and this is the best time for record fish.

Location of fish during the spawning and pre-spawning season takes careful prospecting.

One fine bass fisherman I knew missed out on a lot of fishing because his investigations were too brief and too infrequent. His system in checking a grass flat was to simply run his outboard across

it and watch for the swirls of scrambling bass ahead and to the sides. If there were no swirls he figured the fish weren't on that flat, and he wouldn't check it again for a week. At no time during this checkup would he be more than 300 yards from deeper water and it probably never occurred to him that the fish could be on and off that flat with a few swishes of their tails.

The flats he generally checked probably didn't have many beds as I think that bottom was too muddy, but a lot of big pre-spawners would get out there at intervals before going on the beds elsewhere.

My friend would simply say, "The bass are on the flats," or "The bass aren't on the flats yet."

He'd base his observation on a single brief tour of the area. I have found the fish move on and off the shallows frequently and it takes a daily check to learn if they're present. Water temperature has a lot to do with that, the shallows warming up faster and cooling down faster. In January, February and March you may have to suspend the rules where morning and evening feeding periods are concerned as the chances are the fish are seeking warmer rather than cooler water over most of Florida.

For what it is worth, I have caught more pre-spawners on artificials around 3:30 to 5:00 p.m. on grass flats. This doesn't discount the importance of tidal tables or weather changes. It's just happened that way for me through the years.

SOME MONTHS BACK I stuck my neck out with incomplete information. At the time I had talked to some employees of power plants along Florida rivers and they were being harassed by sportsmen who thought thermal pollution from the plants was detrimental to fishing.

Thermal pollution is a fairly new term to many conservationists, simply meaning the excessive warming of fish habitat by artificial means.

The plants in question had a very minor effect upon water temperatures and probably no meas-
(Continued on next page)



Shallow weed beds like this are prime spots for spawning black bass, but successful fishermen keep up a scouting program as the water conditions change from day to day.



Trolling for shad is family sport and generally done in well known spawning areas, but some checking around may reveal "new" locations.

(Continued from preceding page)

urable effect on fish population. In defending them I wrote too generally in the vein that Florida, not being heavily industrialized, has a minimum of thermal pollution problems.

Larry R. Shanks, project leader for the River Basin Studies, Game and Fresh Water Fish Commission, wasn't long in bringing me up to date with a polite letter which embarrassed me considerably.

Mr. Shanks pointed to one Florida plant, Turkey Point Plant on Biscayne Bay, that is using 275,000 gallons of water per minute for cooling, and boosting the bay temperature 10 to 12 degrees through a three quarter mile radius. This added heat, he explains, puts the bay temperature very near the lethal point for subtropical aquatic life. A pending permit from the Atomic Energy Commission for Turkey Point expansion would permit heating a much larger section of the bay.

Mr. Shanks states that a very similar condition exists at the Crystal River Power Plant and rightly takes me to task for being too passive and conciliatory about the whole thing.

In breaking the situation down for my non-scientific brain, Shanks explains that most of the fishes in Florida are within 10 degrees of their death point during the heat of summer anyway. Addition of that much heat by artificial means would finish them off.

He says, "For every 18 degrees F. increase in temperature the rate of chemical reaction in an organism in an environment is doubled. This means fishes and other life need more food and oxygen as temperature increases. However, as temperature increases the solubility of oxygen decreases in water. Thus the main problems of thermal pollution in respect to organisms are the possibility of direct killing due to heat and indirect death due to asphyx-

iation in waters of reduced oxygen content and increased oxygen demand . . .

"It is only fair for conservationists to ask for closed systems of cooling to reduce damages to the aquatic as well as our human environment."

That's better than I could put it.

THE St. Johns River shad areas are so well established that not many fishermen look for new places. Still, from time to time I hear someone bragging that he has located shad in a spot no one else knows about and has them all to himself.

Evidently the story is that there are certain areas in which shad spawn *every* year due to ideal bottom and water conditions.

In other spots, conditions may be just right occasionally, but the results will not be consistent, probably due to year-to-year changes of conditions. Some shad return to the streams of their birth. Others are a little careless about where they lay their eggs. The American shad (the kind in the St. Johns) spawn only once in the South. Biologists say they spawn two or three times along the northern Atlantic Coast.

Anyway, one good method of locating a concentration of shad is to simply drift along or idle your motor and watch for shad "washes" as they roll gently on the surface. A shad "wash" is easily confused with the disturbance made by a small gar and you should confirm your first observations by looking for others.

The other alternative is to troll all over the river and hope you'll strike a fish. A combination of the two—trolling while you watch the surface may be the best scheme of all.

But most of us will just head for the Sanford area and fish where we see crowds of other fishermen; simpler that way.

MY WIFE and I made a fishing trip to Alaska last summer and although that's a considerable piece from Florida, quite a few Floridians contemplate a tour of the Alaska Highway and wonder what tackle to take, what they'll catch and how to go about it.

Although we used fly rods a lot I confess the best all around outfit for Alaska would be a medium spinning rod, a bucket of shiny spoons and spinners and about 8-pound test line. If you take another rig, make it ultra-light spinning and four or 6-pound line, and go to 10-pound on the medium outfit.

It would be good to take a small boat if possible and a cartop about 14 feet long would be ideal. A 6-horse motor would probably be big enough and you could use that outfit for close-in fishing in the deep bays along the coast. We had a semi-rigid, inflatable boat that worked fine on the little pike lakes but wasn't enough for salt water. We had no motor as we traveled very light in a small, van camper.

There are numerous pike lakes all the way up and you can find them through local inquiry. Arctic grayling are found in most of the small streams and will take small flies and spinning lures. A 15-incher is a big one but they're fine for food. The lake trout are sportiest just as the ice goes out, probably June, but if you're willing to pass them up for silver salmon along the coast, the best time to arrive in Alaska would be late July.

That time of year is fine for the trout and grayling streams, and the silver salmon are just beginning to run along the coast. That's too late for the king salmon or "spring" salmon, but I'd say the silver (coho salmon) is the light tackle favorite and your medium spinning outfit will work on them in either fresh or salt.

Streams and lakes along the Alaska Highway (1500 miles) aren't heavily fished a short distance from the road, most tourists feeling any walk of more than 50 yards is a journey into the unknown. Be prepared to go to a little effort in getting to the fish.

Now most of the fabulous trout fishing must be reached by side trips and the best of it is generally found by float plane. However, the dolly varden trout is available beside many campsites.

The northern pike is scorned by many fishermen as simply a "jackfish" but I certainly have no objection to them. In the Yukon we pushed our little blow-up boat into a small lake where I'd hesitate to dabble my fingers in the water. Although these northerns swatted spoons happily I believe we had somewhat better luck with flyrod streamers carrying a little tinsel or mylar.

When we got to the silver salmon waters, however, I had a rough time with the flies, and found spoons and spinners much more effective. It is

true that the silver, or coho, salmon is caught with fly tackle but I believe spinning or casting will be the winner most of the time.

There are a few silver salmon guides along the Alaska coast and you can bottom fish from a very few party boats but, for the most part, you'll be glad you have a skiff or canoe along. I'd make it a cartop as I'd much rather not tow it over the 1,000 miles of gravel on the way up and a light boat will be much handier for small lakes and streams.

We came back on an Alaska ferry from Haines, Alaska to Prince Rupert, British Columbia, and stopped at Hazelton, B. C. to fish for steelhead in the Kispiox River. That's specialized fishing and if you've never done any steelheading plan on several days to get the hang of it, whether you use flies or casting gear. Anyway, that's a pleasant way to come back toward the lower states as the ferry ride cuts out most of the gravel road.

Inside Alaska there is a lot of paved highway. Most of it is slightly wavy because of freeze and thaw, but it's smooth riding at 50 miles an hour or better.

A Florida fisherman heading for the northernmost state probably wouldn't need to buy any new tackle at all unless he added some wobbling spoons in various sizes.

I'd say the best way to travel would be with a truck camper; a travel trailer would be a close second. Finding a motel during the tourist season is sometimes inconvenient.

At Valdez, on the Alaska coast, they have a number of mounted game specimens, indigenous to Alaska. Each has its name posted below it.

One of the mounts is a little, white weasel. Below it is the caption: "*Texas Polar Bear.*"

TAXIDERMY IS A BIGGER business than most fishermen realize. I visited the Al Pflueger, Inc., plant at Hallandale, Florida, and after being led open-mouthed through the huge shop I learned they can be working on 16,000 fish at the same time. They're specialists in marine taxidermy and do no other kind. It's an old firm and they claim to have mounted 1,000,000 fish since going into business.

But the thing that interested me most was the story about how much artificial stuff actually goes into a fish mount. You can get an even money bet at a fishing dock that mounts are entirely plastic or fiberglass. Generally that isn't so. They prefer to use as much of the fish as they can. It's the many coats of paint that give it that plastic look.

Of course there are some artificial parts such as the sails on sailfish and some kinds of fish turn out as "models" cast from a form.

But if you object to the current methods take a look at some of the "stuffed" fish of years back. Most of them look like mummies. ●

A FAVORITE TARGET of waterfowl hunters in peninsular Florida is the Florida duck, or Florida mallard, which is under intensive study by Commission wildlife biologists this season.

According to Dr. O. E. Frye, Jr., Director, recent estimates of Florida's waterfowl harvest indicate the Florida duck accounts for about ten percent of the annual kill. This would place from ten to twenty thousand Florida ducks in the hunter's bag each year.

The Florida duck is the only waterfowl species produced in south Florida in significant numbers.

In this study biologists will attempt to discover the factors that limit Florida duck reproduction and distribution. Because of the local nature of this duck, new knowledge may result in management techniques that could greatly increase the Florida duck population, thereby making Florida duck hunters less dependent upon migratory waterfowl and breeding conditions in Canada and the northern states for their shooting.

Frye said, "With this objective in mind the Commission recently extended a study grant of \$4,000 to the Wildlife Ecology Laboratory, School of Forestry, University of Florida for Florida duck research on the Kissimmee Chain of Lakes."

FIVE RESEARCH PAPERS on wildlife topics were presented by Commission biologists at the Southeastern Association of Game and Fish Commissioners meeting, held at Baltimore, Maryland, October 21-23, 1968. They were:

"A Study of Nesting Turkeys in Southern Florida" by Lovett E. Williams, Jr., David H. Austin, Neal Eichholz, Tommie Peoples and Robert Phillips.

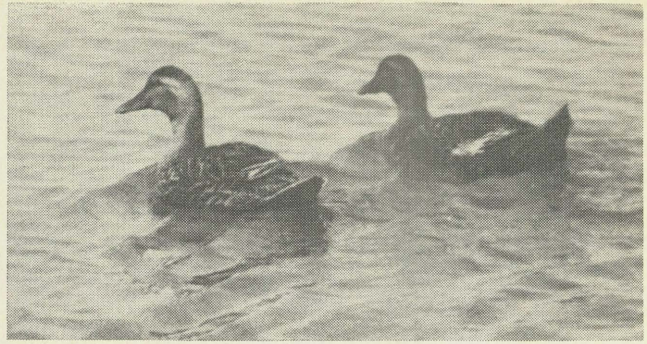
"Diazepam and Alpha-Chloralose Mixtures to Capture Waterfowl" by E. Dale Crider and Jimmie C. McDaniel, Commission biologists, and Vernon D. Stotts, Maryland Department of Game and Inland Fish.

"Oral Drugs Used to Capture Waterfowl" also by Crider and McDaniel.

"Data on Alpha-Chloralose for Capturing Black Bears" by Steven K. Stafford and Lovett E. Williams, Jr.

"Alligator Research in Florida: A Progress Report" by Tommy C. Hines, Michael J. Fogarty and L. Carlton Chappell.

"IN ANCIENT TIMES, as in the 20th century, the first efforts of man to manage game and fish lay in restrictions against taking. For example, in the Bible (Deuteronomy 22:6) there is a passage which tells us that it is proper for us to take the eggs and young of a bird on a nest, but not to bother the bird—obviously aimed at protecting the breeding stock.



The Florida duck is restricted to central and south Florida. It is nonmigratory; a ground nester; has a light tan head and orange feet, a generally brown body. Wing patch is purplish.

"The Greeks and Romans had game laws whose objective was not to conserve game but to keep people from frittering away their time hunting and fishing. This is certainly a different approach from that of today when an acknowledged objective of wildlife programs is the wholesome occupation of leisure time.

"The first recorded instance of game management occurred six centuries ago when Kublai Khan actually practiced game management, complete with closed seasons, enforcement officers, game food plots and artificial feeding. History indicates that from that time until very recently, relatively little emphasis was placed on managing game habitat.

"In the United States, as would be expected, restrictions on hunting and fishing were the first evidence of man's interest in game and fish conservation. The first closed season on deer of which we have record was in Rhode Island in 1646. The first introduction of exotics (Hungarian partridges) occurred in New Jersey in 1790. The first hunting license was in New York in 1864. The first state-imposed bag limit was in Iowa (25 prairie chickens per day) in 1878. The first refuge was on Horicon Marsh in Wisconsin in 1891. The first state game farm was started in Illinois in 1905. The first state food planting program occurred in Pennsylvania in 1917. And the first major scale private game management program involving scientific investigation was begun in 1924 by Herbert Stoddard and his associates in the Tallahassee-Thomasville area of Florida and Georgia.

"When we review the history of wildlife conservation and realize how recently anything other than guess work and barbershop opinion has been utilized in wildlife programs, it is little wonder that today we have some of the problems of communication between the average sportsman and the biologist . . ."

From The President's Message, presented by Dr. O. E. Frye, Jr., President of the Southeastern Association of Game and Fish Commissioners, at the 22nd Annual Meeting, October 21, 1968 at Baltimore, Maryland. ●

Houseboating



By ELGIN WHITE

the use of rented houseboats for relaxing out-of-the-way cruising is fast growing in popularity for outdoor family weekends—and vacations

THE LADIES, God bless 'em, have brought about more changes in boating in the past few years than the invention of the sail, oar or outboard. The invasion of the feminine set has truly changed what once was primarily a man's world into a sea of family fun.

The female impact changed galleys into kitchens, wheelhouses into salons and heads into powder rooms.

The biggest change has been wrought in houseboating. It is an amazing thing to me the sudden and ever-increasing yen for houseboats among the salty set. Shucks, I can remember just ten years ago when some plunky entrepreneurs in the Keys tried renting some small houseboats on the same basis as other boats were rented and they busted quicker than the 1929 stock market.

I imagine, however, that the cost of a rental of a houseboat in 1957, tabbed at \$250 per week, shocked the then neophyte boating clan into retreat. That was a whack of federal diplomas to pour out for one of those small and unknown bulky craft, and the folks simply shied away from it.

But today, houseboats that have every comfort of home plus an extremely easy mode of handling have made one heckava comeback. The cost is

even greater now for a week's rental, but the more affluent boaters of today hardly bat a lash at cost.

There are several top operations in Florida as we head into the peak of the winter season, and business is fine, thank you!

John Erving down Kissimmee way has been operating his "Surfside Six" houseboat rental operation for two years now, and John is here to stay. He started out back in '66 with two 30' Drift-R-Cruz boats that rented for \$235 per week. The immediate success warranted the purchase of two more houseboats, with one of them being the luxurious 43' Cargile that looks as if it were designed for King Farouk.

In two years, now, Erving's houseboat rentals are going like crazy, and he is now planning another 43' Cargile to joint the fleet. As in everything else, the cost of houseboat renting has advanced. "Funny thing," Erving said, "the bigger houseboat with all the plush appointments is more in demand than the smaller ones. That's why we're planning on another one to keep up with requests."

Everything is furnished on these floating homes except groceries and fuel. "You'd be surprised," Erving continued, "at the things people can do as a family group on these houseboats, and, of course, I think that's the reason for their increasing popularity."

John listed such activities as fishing and hunting, specimen collecting, star gazing, bird watching, trap shooting and rock hunting as the most popular pastimes on the houseboats by family groups.

The boats (smaller ones) will sleep from four to six in comfort, and when you break that rental tab down among six guys, for example, going out for a fishing vacation jaunt, it scatters out pretty well. And for a family tab, consider what it would cost to have a similar vacation for a group of four to six . . . probably two hundred bucks more. And on this one, you take your motel with you on lake, river and stream.

There was one group that found an unusual use
(Continued on next page)



Houseboats rented at "Surfside Six" can be used to cruise the fine waters of Kissimmee River and the connecting canals down into Lake Okeechobee.

(Continued from preceding page)

for renting one of John's houseboats for a week-end. "Two couples came in one day," Erving said, wanted a boat for two days and one night. They took the boat a mere 500 yards offshore into the lake, anchored, and played bridge for the entire time. They just wanted to get away from the kids, people and telephones, and found the perfect retreat."

Usually when callers first ask about the price of rental houseboats, they're shocked out of their socks. But when compared to what they would pay for a standard vacation stay for a week SANS BOATING, they see the light and figure it is a pretty good deal after all.

Another unusual and highly popular houseboat rental operation is the one at Flamingo in Everglades National Park. Bob Knight, the major domo of that operation, has a fleet of 34' Drift-R-Cruz houseboats that are in heavy demand.

These fine craft are available for an entire week for just \$235, and they even furnish the fuel! You can't beat prices like that!

The rental houseboats at Flamingo have opened entire new vistas of boating adventure for family groups. You can cruise through the virgin wilderness of the fabulous and mysterious Everglades at a leisurely pace, along placid waterways where the fishing is among the finest in the world.

Many family groups take these cruises to see the rare and exotic bird life in the Everglades, where rookeries of white ibis, roseate spoonbills, egrets and other magnificent birds vie for atten-

tion with the alligator, the Everglades' most notable tenant.

Bird watchers who have long considered the Everglades prime "birding" territory are adding a new facet to their hobbies by seeking out these rookeries by houseboat. And the nicest thing about the whole deal is you can find a rookery, anchor for the night, cook a tempting meal in a modern kitchen, and wait for the birds to show. What better way to really get with nature?

Knight cautions, however, that you can't wheel it into Flamingo and rent one of these houseboats with the notion of pile-driving out into Florida Bay and on to the Keys. "We restrict operation to the waterways of the 'Glades and surrounding estuaries," Bob said. "We cannot allow the boats to be taken from Flamingo across the bay to the Keys. But there are enough explorative waters in the 'Glades to satisfy the most demanding adventurer."

It isn't imperative you rent these houseboats by the week, either. You can get one for two days for \$95. A week-end excursion will run \$115, three days \$135, four days \$170, five days \$200, six days \$225 and the entire week \$245. A day begins at 2:00 p.m. on any given day and ends at 10:00 a.m. the return day. "Weekenders" are from 2:00 on Friday 'til 5:00 p.m. Sunday. Most houseboat rental agencies require a \$50 advance deposit with refunds being made upon cancellation prior to 48 hours of reservation date.

At present there are four operations in Miami that rent houseboats for cruises into the waters of Biscayne Bay and the Intracoastal Waterway all the way to Key West. But you must stay in the confines of the intracoastal, no wandering out to explore the great white waves of the Atlantic Ocean or Gulf of Mexico. The reasons for this are fairly obvious. Most people renting houseboats are fairly capable skippers, usually having boats of their own, but a houseboat is a far different creature than a regular boat, and only an experienced skipper can take one of these "square riggers" into far open waters with any degree of safety.

The four operations in the Miami and Miami Beach area are Bayshore Houseboat Center with locations at 2560 Bayshore Drive in Miami, and 700 South Federal Highway in Pompano Beach; Commodore Yacht Rentals, 18494 West Dixie Highway in North Miami Beach; International Yacht Rentals, Inc. at the Flamingo Yacht Basin on the 79th Street of Causeway, and Hobo Headquarters at 261 S. W. 6th Street in Miami.

Drift-R-Cruz houseboats are available for rent at Flamingo.





Bird watchers and fishing enthusiasts can move right into the "jungles" for two or three days on rented houseboats.

At Bayshore Houseboat Center, the boats run \$325 per week with everything furnished except fuel, groceries and linens. The linens cost \$1.50 per person per week for regular linens and \$2.50 per person per week for blankets. And don't think you won't need blankets if you roam the waters to the Keys, especially in January, 'cause it gets a bit airish.

At Commodore, you can rent the 34' Drift-R-Cruz for \$400 per week. These houseboats are powered with a 210 h.p. inboard-outboard, and the tab includes all supplies except groceries and fuel.

International Yacht Rentals on the 79th Street Causeway, Miami Beach, also features the Drift-R-Cruzers. The tab is \$300 per week off season, and \$395 and up (depending upon boat sizes and special equipment) during the winter season.

"Hobo Headquarters," seemingly appropriately named, appears to be the best deal in town. Here you can rent smaller houseboats for as little as \$80 for a three day week-end and \$160 for the entire week. Camp-N-Cruise is the name of the rental outfit at "Hobo," and they, too, put on the extra tab for fuel and you must spend an additional \$5 for rental on linens, utensils, etc. But even at that the price seems most reasonable.

After the bath a lot of houseboat rental operators took in setting up in the Keys back in 1957, the latest venture seems to be paying off in spades. This really seems to be but a beginning to a head-on

charge into houseboat rentals all through south Florida. I look for more operators to get in the act, and we hear now that there may be as many as six to ten rental places in the Gold Coast and Keys area by mid-1969.

One new outfit, we hear, is going in for the plush barges only, 45' and longer and, of course, they will get premium prices for them. But there are many potential houseboat "rentees" so to speak, who wouldn't bat a lid to a \$500-900 price for one of these palatial yachts for a week. Again, look at what you get and where you can go and the price is most reasonable.

Another attraction about this newest craze in south Florida waters is the fact that you don't need a license to operate a houseboat. Of course, they won't let anyone take one of these craft onto the waters without proper instructional procedures.

We're planning a little houseboat jaunt at Flamingo in the near future, and will report on the entire experience. From all I can see, hear and tell, though, houseboating through Florida waters is the newest and best way in the world to get away from it all, and still take it all with you.

The sailboard and other small sailboats are luring many a landlubber off the golf course and onto the water. These craft are inexpensive, easy to transport and allow the novice skipper to master the rudiments of sailing before moving up to something more exotic.

Larger sailboats, too, are enjoying unprecedented popularity, but as a first hand witness, I can say that sometimes my feelings about sailboats can be mixed, to say the least.

Reason I say this is because we recently completed a cruise from Marathon to the Dry Tortugas in a sailboat, and though the craft itself was a beauty, you have to depend so much on the caprices of the weather.

Fortunately, the sailing craft we were on had an auxiliary motor, or we would probably still be about half way between Key West and the Dry Tortugas with no wind. What a revoltin' situation than can be!

I can imagine the old time sailors on the big barks and square-riggers having to follow the wind around the world, and when there was no wind, they just sat out there, dreamin' of orange juice and fightin' scurvy.

I must admit it was a good cruise in spite of the doldrums we encountered, but I mentioned the doldrum bit as a small argument that all is not serene in sailing.

However, when one does enjoy the blessings of a spanking breeze, you gotta admit . . . sailing has no peer. ●

A FLORIDA GRAY SQUIRREL is a big-game animal weighing about a pound and with a 9-inch tail. He is no harder to hunt than an African leopard or an Indian tiger, but there seems to be a wider variety of methods.

Give almost any sneaky, gum-shoeing, tricky, furtive American boy a few years of experience with gray squirrels and he should be all set for any of the big game trails of the world.

He should be able to hold his breath for long periods of time, and at least one extra eye near the back of his head would be very helpful although not absolutely necessary. He should be immune to sneezing and scratching, even though ants parade up his pantlegs and his nostrils fill with weed seeds. Some of the attributes of a chameleon would be helpful; he should be able to change color slightly with his surroundings, and should be a crackshot with a smallbore rifle. He needs lots of spare time, preferably being unemployed.

At this moment of writing I am within easy shotgun range of five gray squirrels, but the season hasn't opened yet and they aren't worried. We live among some venerable oak trees and I have no

idea how many different grays rob our bird feeder, tease our dog and play follow-the-leader over our roof. I should know a lot more about squirrels than I do.

I know enough about gray squirrels to be pretty mystified about their periods of activity. Any squirrel hunter who could consistently forecast their feeding and exercising periods would have it made.

Generally there's a period of heavy activity about dawn and if I had my druthers as to the time to be in an oak hammock with a squirrel appetite it would be early morning—but sometimes they apparently sleep in, even though the weather might seem favorable for squirrel travel. Late evening would be a second choice for squirrel seeking. With a low pressure area moving in they might run right over your feet.

In rainy weather you don't see much of them except for very brief periods, but they generally go into a real feeding binge with approach of bad weather, evidently being highly sensitive to barometric changes. This shows up plainly through my window and is born out by hunting experiences.

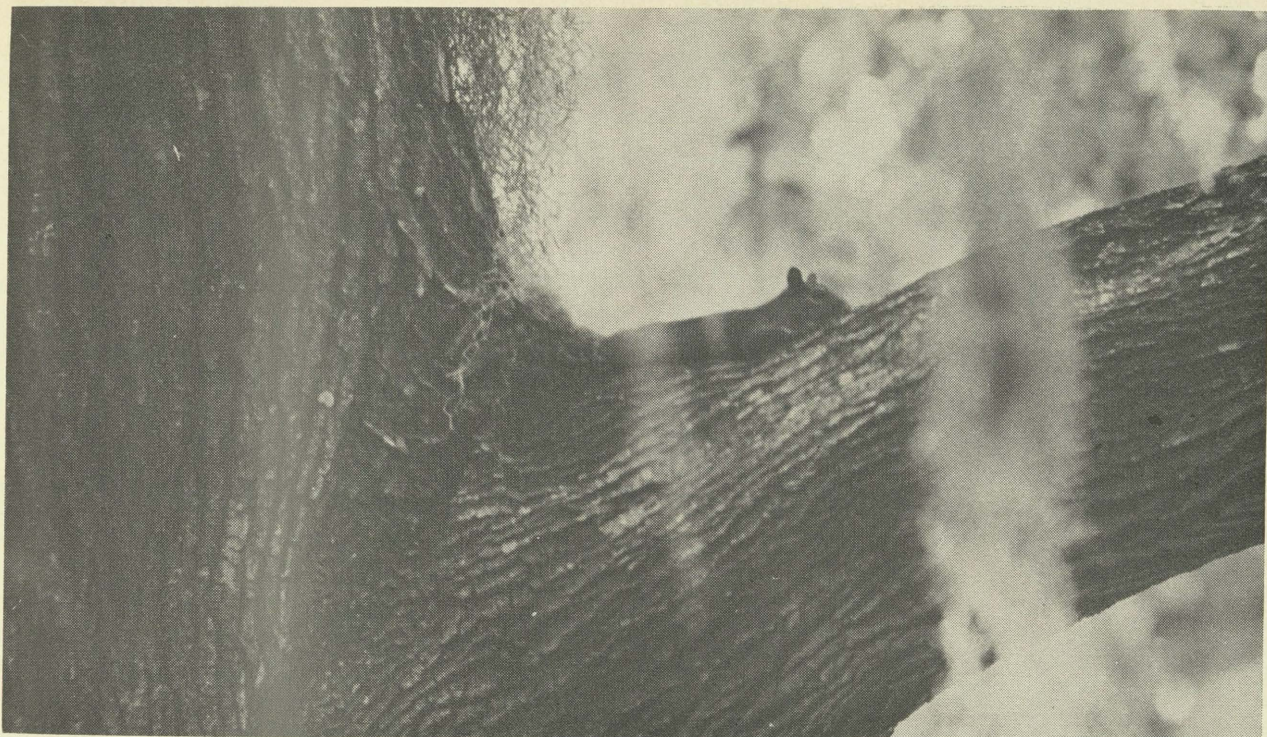
But there are more complicated things about

there can be some rather
simple things—along
with complications—when
trying to learn about a
squirrel's general activities

Smallest Big Game Animal

By CHARLES WATERMAN





Shotguns aren't out of place when the squirrels are wild and traveling in oak tops. The camouflage suit, lower left, is a Game Winner outfit. Hidden but curious squirrels, above, may come out of hiding within ten minutes if the hunter is quiet.

Photo By Gene Smith

squirrel activity. Sometimes, for no apparent reason, every squirrel in the hammock will start tearing around as if preparing for a 6-month night. More experienced hunters than I feel that the squirrel is especially keyed to the movement of tides and that he can be sought with the aid of solunar tables even more consistently than fish.

Take a very warm sun at midday. That's the weather and the time when a gray squirrel is supposed to be flaked out in a sound siesta and quite often he is but there are days around our house when, like traditional mad dogs and Englishmen, the gray squirrels go out in the midday sun, eat everything in sight, chase each other around the oak trunks and behave like charged up cat squirrels in general. So there are no really strict weather rules. *Generally* they don't like rainy weather, sleep a little late on frosty mornings and move less when it's hot.

Cat squirrels (I like the name "gray" better) are noted for mass movements. Hunters and other woods travelers tell of seeing large, loose bands on the go and sometimes even swimming rivers. Usually it's a matter of finding new feeding areas; sometimes there's no readily understood reason but these migrations cause the population to ebb and flow in small areas, even though an overall population might remain fairly constant.

I've heard reports of squirrels leaving a feeding area en masse in late evening and heading for another spot to spend the night, often a spot that

seemed no more comfortable than the feeding place. No humanly logical reason for the move.

The largest of Florida gray squirrels are reputedly found in swamps rather than on high ground; same species, just bigger. Theories are that swamp food builds bigger bodies and that harmful parasites are more plentiful on the ridges. Maybe this isn't very scientific but it seems to be true.

Squirrel hunters have as many systems as horse players, but they boil down to some pretty efficient practices which I'll endeavor to outline. There are some methods I won't have space to cover and quite a few I've never heard about.

Now as to armament: They are killed with everything from deer rifles to blunt sticks, and the gun preferred depends partly on the hunter and partly on the conditions.

Take a guy who isn't out to demonstrate what a hell-slather of a shot he is, just wants some squirrel stew in the easiest possible way, and knows where there are some unsuspecting grays in some trees that aren't too high.

He's apt to take a shotgun with light loads and even the little .410 is a pretty good choice since it won't vaporize a squirrel, even at 18 or 20 yards. Most of these shots will be at targets sitting still or moving at moderate speed.

The shot size can be fairly large. For bird shooting the .410 requires very small shot to throw a dense enough pattern. Eights or nines are generally advised as proper shot for either it or the .28, but when it comes to squirrels, sixes or even fours may be practical.

(Continued on next page)



Photo By Bill Hansen

(Continued from preceding page)

Small shot (and this goes for bigger shotguns especially) makes eating a squirrel quite an adventure. The little stuff, besides being too plentiful, doesn't go on through so it stays in the squirrel and eventually gets in your teeth.

The .22 caliber rifle is probably the most fun for squirrels and generally it's a repeater with open sights. A good shot can get sitting squirrels through the head at close range and can bag running squirrels with reasonable regularity by laying down a barrage. For this saturation fire approach, a semi-automatic is best with a pump a little slower and the lever action next in speed. The bolt action for all its fine accuracy and reliability isn't quite fast enough for the best work on running game.

A skillful still hunter with a scope sight on his twenty-two will likely have more game at end of the day. If the scope is of low power and has a wide field, he can follow moving animals pretty well and will have a lot more accuracy on standing shots. He can also use his scope to identify suspicious bumps on high tree limbs.

With a heavy, target-type twenty-two and a good scope, hitting squirrel heads isn't difficult because, after all, a squirrel noggin is pretty big compared to the center of a smallbore target. Any member of the local smallbore team will find it almost too easy if he confines his shots to 50 or 60 yards and manages to find a steady position for his shooting. The target scope, of course, is very poor for moving targets.

"Barking" a squirrel isn't nearly the legerdemain it was once considered. It's simply hitting a limb so close to the squirrel's nervous system that he passes out and falls from his tree. It can be done with a highly accurate, rimfire twenty-two and is much easier if you have a varmint rifle with added velocity. I don't mean you're just going to throw up fast and collect a bushytail without a mark on him, but if you take a good rest and squeeze carefully it's quite possible.

I think I have the world's greatest squirrel rifle, although it's a little heavy to tote and won't spray very fast if the squirrel decides to leave.

It's an old model Winchester 52 target rifle which I had chopped down to carbine length. On this hair-splitter I mounted a 2½-power scope with plenty of brilliance and fairly small crosshairs. Of course so low-powered a glass won't bring out all of the potential of the fifty-two, but it has a wide field and you can find a scurrying limb-hopper with it.

It was quite a gunsmithing job to rig that old rifle and I don't recommend that anyone else bother with such a project, but now that it's in service it's pretty nice. The bolt handle had to be altered and mounting the hunting type scope rings was a job. It would be more practical to buy a youth's target rifle or a hunting weight gun.

Shotguns are really needed when fast moving squirrels jump from branch to branch away up there. Probably you can kill more small game with a shotgun than any other way.

A good target pistol limits your range considerably but, where the game is plentiful, it will do the job. I have killed a lot of fox squirrels with handguns but they're a bigger target and generally easier to collect than grays.

The head shot isn't always possible, even on a stationary squirrel. When you hit the head it doesn't make much difference what kind of twenty-two ammunition you use, but a high-speed hollow point in the body can damage a lot of meat. Squirrel shooters are divided here. Some say the standard velocity long rifle cartridge with a solid bullet is ample for killing and short on stew destruction. Others say there is more possibility of wounding with the solid bullet and use the hollow point to be sure. If you pick your shots, the solid bullet is ample. If you shoot at every part of a squirrel you see maybe you need hollow points.

Where there hasn't been much hunting a cool marksman can do fine with a good quality air rifle, but that's an expert's gun and usually wielded by a beginner.

If the game hasn't been pestered too much a very slow walk through an oak hammock will produce. Stop frequently and keep an eye on the ground as well as on the overhead limbs. If leaves are quite dry on the ground you make so much noise you not only move the squirrels but drown out their sounds. If it's windy they aren't so likely to hear you but they don't seem to move about much then.

Where feeding signs are plentiful you can simply take up a good position, keep quiet and wait. It's not necessary to build a blind and it's logical to get into a comfortable position where you can see a large area. It's easy to get yourself into a spot where you hear them shaking the trees down behind you but can't squirm around to shoot.

When walking into good country you'll frequently see them moving too far ahead to shoot and they'll disappear with your approach. Sometimes they'll be back in circulation only 10 minutes after you take up a position. If they haven't been hunted much they may be curious enough to start peeking around limbs sooner than that. If they're strafed every week-end by bad shots they may not come out at all until you get hungry and go home.

The same grays that are easily scared by big feet in dry leaves may not be greatly startled by a shot. If you make a clean kill or a clean miss from your stand, just wait for another chance. Of

course a soft-spoken twenty-two has less frightening effect than a bellowing 12-gauge.

It's human nature when taking up a stand to figure exactly where the game will appear, devote all attention to that spot and fail to see a parade of bushytails behind you or off to one side.

Red camouflage is good to wear because the color isn't picked out by squirrels and it has a safety factor, but it's highly visible to turkeys. Few hunters seek turkeys and squirrels at the same time and the truth is expert turkey hunters are likely to have a very dim view of squirrel hunters anyway.

There are several practical means of calling. I don't mean you can get them swirling around you like crows, but you can often cause a concealed wise guy to peek out.

After sitting quietly for a considerable time, a little judicious brushing of a palmetto branch or other switch in the mast at your feet will frequently get some attention. Don't overdo it.

Cup your hands over your mouth and, with the lips pressed tightly together, make an overdone kissing sound getting a squeaking effect by sucking in the air through your closed mouth. This often causes a shiny eye to appear in an oak notch or beside a high limb.

I have heard that chipping two stones together is a fair imitation of a squirrel's bark but haven't tried it. There are numerous types of squirrel calls or "squackers." I have one made by the Lohman call people which consists of a loose splinter or reed mounted in a cylinder-shaped

(Continued on next page)

The author, right, holds his "perfect squirrel rifle," an old target piece cut down for convenience, and with a low-powered telescopic sight. The brushing of the ground with a palmetto frond will sometimes cause a hiding squirrel, left, to peek out around the corner to see just what is going on.



(Continued from preceding page)

resonance chamber. You simply strike the reed with a thin blade of wood and it barks without much practice. I have the best luck when I hit it fairly hard but don't overdo it. As in any other kind of calling, moderation is the key to success.

A real student of squirrel habits might be able to carry on a true squirrel conversation and actually bring them from some distance. I hope only to make them show themselves when I think they're nearby.

Not all of the hunting methods are sneaky. I know one shotgunner who simply walks through the forest at a moderate gait paying close attention to both ground and trees. If he sees a squirrel on the ground too far ahead to shoot, he runs at it and is likely to close the distance enough for a shot either on the ground or as the squirrel goes up a tree.

A good-sized party spread out through the woods will sometimes move startled, feeding squirrels from one to another.

Squirrel dogs can be of almost any breed. They needn't be long on trailing but should simply put the squirrels on the run and then locate the proper trees. Some prefer dogs that bark and others say it's best to have the dog simply stand beneath the tree, getting the game's attention. It is true

Good hunting shots can be boasted with .22 repeaters for oak hammock squirrel sniping. Mossy oaks are good hiding places.



that a squirrel may not run nearly as far from a dog as from a man. He may be so interested in Rover that he poses for an easy shot.

When a startled squirrel is known to be in a small tree, a single hunter often has trouble making him show himself as the quarry keeps moving around to keep the tree between the gunner and his game. One way is to hang a coat on something and then sneak close to the tree and around it in hope the squirrel will attempt to hide from your coat. If he has only recently taken to the tree you can often cause him to show himself by tossing a stick or rock to the opposite side.

Boat hunting accounts for plenty of full bags in Florida swamps and along the streams, especially early in the season. Ideal equipment includes a skiff or canoe that can be moved quietly, preferably with a paddle, and two hunters fare better than one. A marksman in the bow can do some sniping as the boat moves along. When game is sighted, and there's no immediate opportunity for a shot, the paddle man can ease over an anchor and they can wait for the target to reappear. It's a lazy way to look at a lot of trees in a few hours.

Although one old timer insists a squirrel is exactly the same color and shape as anything he climbs on, there are some things to look for.

Ordinarily I think squirrels are easier to locate when you are facing toward the light, approaching from the shady side if it's a sunny day. Of all the motionless squirrels I've ever sighted by simply walking through the woods or waiting on a stand I believe the tail has most frequently been the giveaway. Even though it may be plastered pretty tightly to a limb or trunk, the light frequently shines through the long hairs causing a halo appearance, easy to spot if you know what you're looking for.

The animal's head is second most frequently seen, almost always in profile as the rascal invariably watches you out of only one eye. The rest of the body lies so close to the bark that I very rarely pick it out first. Once in a while I first make out the animal's feet when he's on a fairly small limb where their lighter color helps.

Shooting into nests is considered pretty bad sportsmanship.

Most of the hunting rules for grays work for fox squirrels, although there are some differences. Grays are generally found in larger, more compact colonies than fox squirrels which run about twice as heavy individually.

One good hunter tells me that when hunting the fox variety in pines, he's found they're apt to run to the very tip of a tall tree to hide and that a blind shot with a shotgun into the uppermost small branches is likely to bring down an unseen skillet prospect.

They say tiger hunting is fun, too. ●

The Long-tailed Weasel

By GENE SMITH

A RARELY SEEN and little known wild animal is the weasel—of which there is but a single species in Florida, the Long-tailed Weasel (*Mustela frenata*). It is mainly a nocturnal animal.

This shy, small, slim bodied creature often lives closer to people than they know, however. It dens in gardens and behind shrubbery, in old lumber piles and stacks of concrete blocks, beneath porches and tool sheds, and may even set up housekeeping in a cluttered suburban utility room without ever being detected—unless the typical weasel odor prompts a search.

But weasels *are* wild animals and mostly stick to swamps, fields and woodlands. They often invade and occupy mouse nests or mole burrows, dining on the original occupants and lining the place with the victim's fur.

There are about 47 extinct and 29 living genera of the weasel family (*Mustelidae*) in the world today. Nine live in the United States.

The supple little Long-tailed Weasel is buffy or brown above and white underneath—from chin to tail. The feet are brown and the tail is black tipped. Its face is small and dainty, its ears quite small, its eyes beady. The maximum length of a male is about 23 inches, of which around 7 inches are tail. Females are considerably smaller—10-15 inches long.

In some populations of the Southeast, the face of the Long-tailed Weasel has white markings. And in the North and Northwest, the fur turns white in winter, brown again in summer. But the tail always retains its distinctive black tip.

Because of its small size, agility and ability to climb, the weasel is quite secure, entering and leaving its chosen home quickly through unbelievably small cracks and holes. It can swim well, too, though not as well as its cousins, the otter and the mink, which are larger, aquatic members of the weasel family.

The weasel eats a variety of lesser animals, which it runs down, captures and kills with considerable gusto and ferocity for its half-pound size. Rats, mice, moles, birds, including an occasional barnyard fowl, and frogs make up its diet. It is a solitary hunter, employing both swiftness and cunning to take its prey.

Its tiny teeth are extremely sharp and effective but the weasel is not without enemies of its own. Housecats, bobcats, hawks, owls, dogs and man all figure in its mortality rates.



Drawing By Wallace Hughes

A ferocious little animal for its size, the Long-tailed Weasel kills and eats many smaller creatures—and some larger than itself. It ranges from southern Canada down to Bolivia in South America—is Florida's only weasel.

When moving along undisturbed the weasel's gait is a simple gallop, with front and hind feet alternately striking simultaneously, side by side. The back is arched high and stretched again at each bound. When pressed the weasel can scamper along at about 10 m.p.h.

The normal litter of young may number from four to nine.

Vocally, it hisses, purrs and screams. Some say it also utters a weak bark.

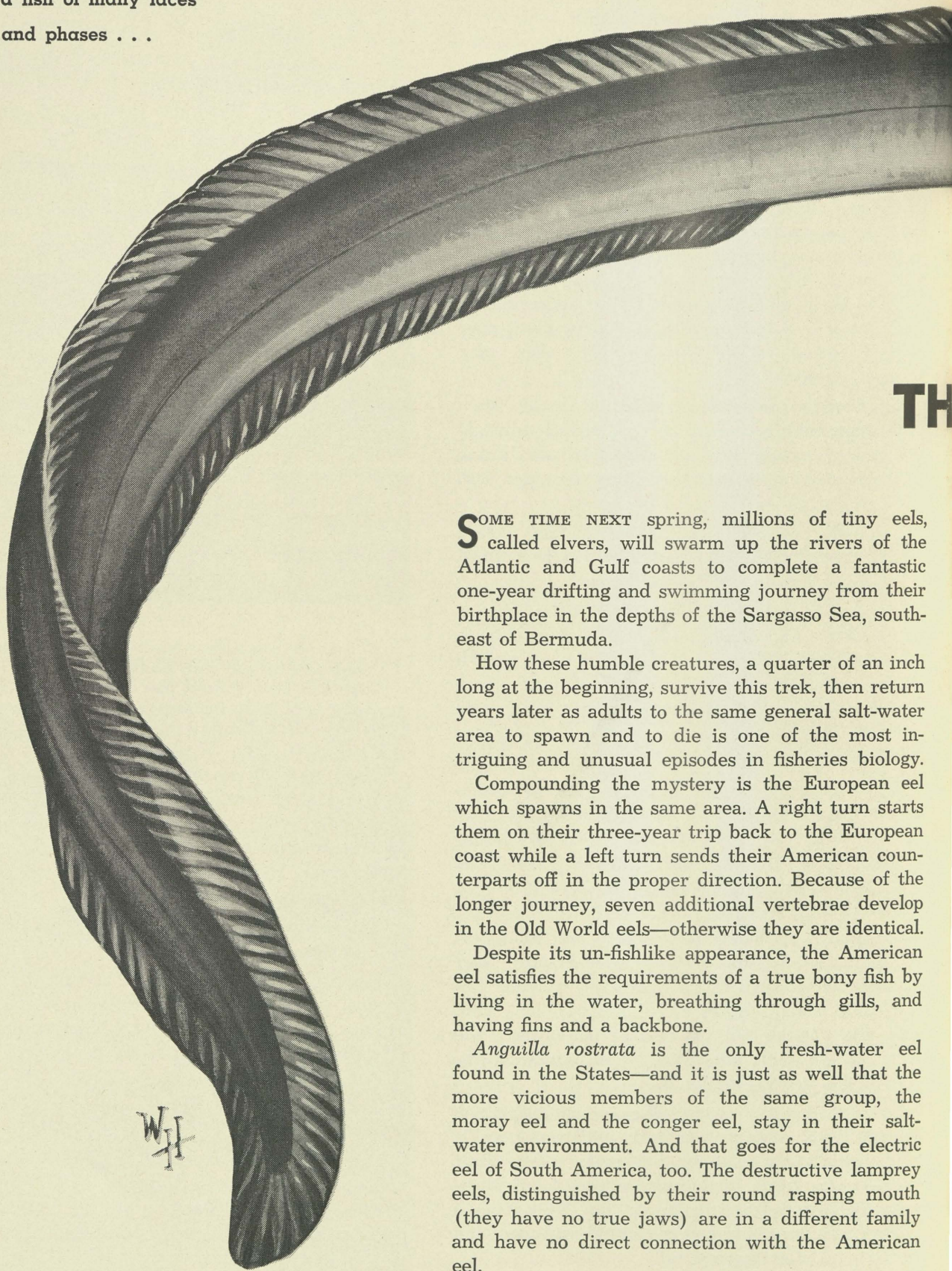
Although there is only one species of weasel in Florida—and it ranges throughout the state except for the southern tip—the family *Mustelidae* is well represented by four other animals: the otter, the mink and the striped and spotted skunks.

And speaking of the family, it also includes the marten, the fisher, the badger, the ferocious wolverine—of the northern or western states and/or parts of Canada—and the rare Black-footed Ferret of the western plains.

Finally, there are two other true weasels in North America: the 2-ounce, 9-inch Least Weasel and the Short-tailed Weasel—better known, especially to the ladies, as ermine. ●

a fish of many faces
and phases . . .

TH



SOME TIME NEXT spring, millions of tiny eels, called elvers, will swarm up the rivers of the Atlantic and Gulf coasts to complete a fantastic one-year drifting and swimming journey from their birthplace in the depths of the Sargasso Sea, south-east of Bermuda.

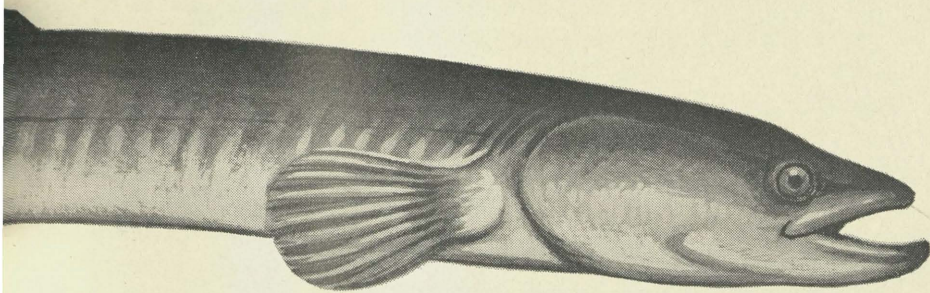
How these humble creatures, a quarter of an inch long at the beginning, survive this trek, then return years later as adults to the same general salt-water area to spawn and to die is one of the most intriguing and unusual episodes in fisheries biology.

Compounding the mystery is the European eel which spawns in the same area. A right turn starts them on their three-year trip back to the European coast while a left turn sends their American counterparts off in the proper direction. Because of the longer journey, seven additional vertebrae develop in the Old World eels—otherwise they are identical.

Despite its un-fishlike appearance, the American eel satisfies the requirements of a true bony fish by living in the water, breathing through gills, and having fins and a backbone.

Anguilla rostrata is the only fresh-water eel found in the States—and it is just as well that the more vicious members of the same group, the moray eel and the conger eel, stay in their salt-water environment. And that goes for the electric eel of South America, too. The destructive lamprey eels, distinguished by their round rasping mouth (they have no true jaws) are in a different family and have no direct connection with the American eel.

As one student of ichthyology stammered when hardpressed by his professor to describe this elongated fish, "Why, it's—ah—ah—eel-shaped!" And you can't do much better than that.



AMERICAN EEL

By ART HUTT

The long, flexible snakelike body is round but slightly flattened at the bottom. Rows of small sharp teeth line the jaws; the lower one juts out slightly in a mildly pugnacious manner. Coloration varies but is usually close to a greenish brown on top grading off to a whitish grey underneath.

Unlike most other fish, the eel has only one set of fins—stubby, strong, rounded pectorals located above and behind the small gill openings. Locomotion is by serpentine-like undulations of its long body. Distinctive, too, are the long dorsal and anal fins which merge with the caudal fin in one smooth wraparound effect.

This is the creature everything is “as slippery as.” Tiny, imbedded, cycloid scales, some 150 to the inch, create a smooth, slick appearance and feel. Scientists figure these microscopic scales are degenerative remnants of now unnecessary larger scales. Coating these scales is a heavy layer of protective slime. If you’ve ever tried to pick one up, you know there’s no way to hang onto an eel unless you grasp it with a dry rag or newspaper or a hand previously dipped in wet sand.

These fine scales, by the way, impart a naked look, and put the eel on the forbidden list as decreed by Moses. “All that have fins and scales ye shall eat; and whatsoever hath not fins and scales ye shall not eat; it is unclean unto you.” The laws relaxed later and ancient Hebrews were eventually allowed to eat the “scaleless” eel.

How well I remember my first youthful encounter with one of these slippery devils. It was a heavily-dewed morning. I checked a cane pole I’d set out overnight—and succeeded in manhandling the snakelike apparition up into the wet grass where it

promptly shed the hook. The eel was as determined to get back into the water as I was to keep it out. Everytime it slithered down the grassy incline, I’d heroically kick it back, all the while screaming for reinforcements.

After the battle, my tennis shoes were completely—and thickly—covered with whitish slime. Despite repeated washings, they were never the same again.

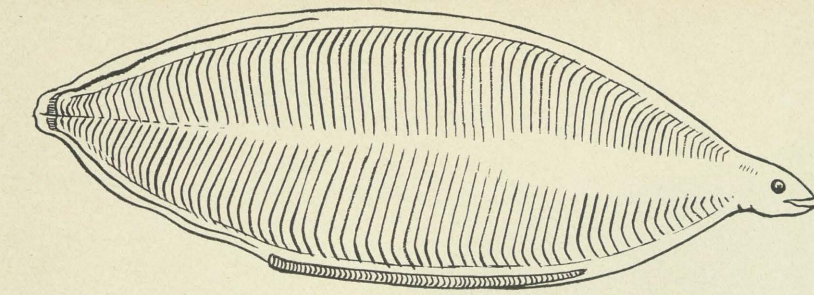
Size of the average female eel in Florida is about two-to-three feet (males are smaller), yet in situations where they are completely landlocked and cannot return to the sea to spawn, they can weigh up to 10 pounds and stretch out to six feet. These isolated individuals, too, can reach a ripe old age. Specimens stocked in several Michigan lakes were still around 50 years later.

During extremely cold temperatures, eels bury themselves in the mud and become inactive.

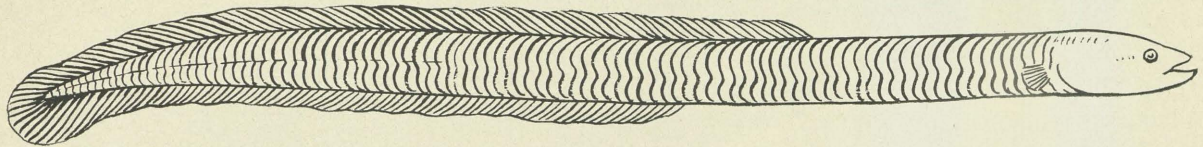
Unlike the American shad and the striped bass which come up into fresh water to spawn (they’re anadromous), our slippery friend returns to salt-water to lay its eggs (they’re catadromous).

It is little wonder that eels have always had an air of mystery about them. They didn’t get off to a very good start, classification-wise. The ancient Greeks, while fairly knowledgeable about other fish, passed the eels off to Jupiter—who usually caught the blame when the paternity of anything was in doubt. Aristotle was convinced that they came from *ges entera*, the entrails of the sea. Pliny asserted that young eels grew from fragments of the skin sluffed off when the adult eels rubbed against rocks. Even Izaak Walton attributed their presence to some kind of “spontaneous generation.”

(Continued on next page)



growth stages
of the eel
Left—the ¼-inch
Leptocephali
Below—the Elver



(Continued from preceding page)

Horse hairs that fell into the water, heavy dews, a small beetle, and gills of other fish were other popular theories on eel-production. Lampreys, too, were sometimes accused of being female eels.

Since the eel has a larval form, called leptocephalus, which is quite unlike the adult, for many years this larva was mistakenly classed as a separate species of sea-running fish.

In a fine display of international interest, in the late 1800's and early 1900's, scientists banded together to solve the riddle of the eel. An Italian named Grassi baby-sat with the larvae—and was astounded when they transformed into eels before his eyes. This was proof positive that the larva was not a distinct species of fish.

But it took a Danish biologist, Dr. Johannes Schmidt, from 1905 to 1933 to put fable and fact in their proper perspective, particularly about that unusual larval stage. For 15 years he patiently dragged a net across the vast Atlantic, charting sizes, seasons, and numbers of the larvae, narrowing down their point of origin, until his nets came up with newly hatched ¼-inch specimens in the Sargasso Sea. His solving of the eel mystery was considered an outstanding scientific achievement, but the expense involved in this research also revealed the importance of the eel as a food fish.

The life cycle of the American eel is a fascinating one to follow.

In the Sargasso Sea, the mature eels spawn. Eggs are microscopic—with a 32-inch-long female capable of laying up to 11,000,000. As with any heavy producer, mortality at all stages of a young eel's life is heavy. The resultant leptocephalus larvae are delicate and transparent, lacking pigment except in their eyes. In shape they resemble a willow leaf, but sport a set of big teeth up front for catching their food. Aided by currents, drifting and swimming near the sea's surface, they begin their year-long journey.

As they approach the coast, a change takes place.

The two-to-six inch larvae transform into a recognizable eel-like shape, losing their oversized teeth. At this stage they're called "glass eels," but as they gain pigmentation, they graduate into "elvers."

The tiny travellers are determined to swarm upstream, pushing themselves around and over obstructions, sometimes paving the bottoms of areas directly below dams. As many as 1,500 have been caught with one scoop of a small dipnet. The males apparently don't work quite as hard at it, but the females, sensing a quiet pond in the offing, will crawl over dewy or rain-wet grass in their determination to gain a desirable home. Some researchers have suggested that they may even utilize underground water routes to get into new areas. Others think that only the females come up into the rivers and lakes, and that the males hang around the river mouths.

Eels like to set up permanent homes in mud-bottomed situations where the water is quiet and fairly deep.

Now in their "growing" color, they're called "yellow eels." If everything goes well, the eels in from 5-to-25 years reach a point where they are able to become sexually mature. In the fall, moving at night, the "ready" eels migrate downstream to head back to the ocean, using a dewy overland route if necessary to get into an ocean-connected river. This time they're in breeding color as "silver eels."

Their sexual apparatus quickly develops in the salt water but they no longer feed. At one-half mile per hour, it takes them about two months to reach the area in which they were born. Once there, the eels spawn (at about 500 to 1,000 feet depth) and, the cycle complete, die.

Why the Sargasso Sea? Most likely this is the only area that has water of the right salinity and temperature.

A growing eel is one of the most voracious of fish—both scavenging and preying upon other fish and their eggs, insects, worms, crawdads—just

about anything that it can get into its mouth. Eel stomach X-rays have revealed such items as a lead pencil, steel spring, pieces of wood and metal, and bones of water birds and small rodents.

There seems to be no special technique involved that will bring an eel specifically to your hook. Most daytime catches are accidental as eels most commonly feed at night, locating their food largely by smell. In recollecting the few I've caught in Florida, however, they've all been hooked while fishing for shellcrackers with a worm-baited hook over a clean bottom—in the daytime.

Bobbing for eels was great sport in the old days. The angler used no hook—just a tangle of worms tied to the end of his line by short threads. When the eel grabbed the mass, it could be hauled in before it would release its grip.

For eels in quantity, especially when they were returning to the sea, commercial fishermen would build V-shaped barriers of rock (weirs) in shallow rivers, placing a trap at the apex of the V.

Eelpots, long cylindrical traps with very small openings, are a popular way of collecting eels. Baited with herring, they're used to some extent in Lake George. October and November are peak months, with 20,000 pounds a month passing through the Superior Fish House at Georgetown. The bulk of the shipments end up in New York and Philadelphia.

Commercial trotliners, especially, cuss out the eel for taking a catfish-intended bait. In some lakes they have days when nearly every hook is adorned with a wriggling eel with no market value—or a market value so low that they are not worth messing with except in quantity. One Lake Griffin catfisherman I checked on regularly was getting back at the eels, however. He used eel chunks—and was catching up-to-40-pound cats on these tidbits.

Camp operators have no love for them either, although it is no fault of the eels. People invariably regard them and exhibit the same fear for them as they do for snakes capable of striking, rather than a fish. T. L. Morgan, camp operator on Lake Griffin is one individual who "hates" them.

"They cost me a lot of money," he complains. "The lake is full of them and a lot of oars get broken when my customers try to kill them or knock them off the hook. Sometimes I can hear the people out there pounding on an eel. And there is always the slime that must be cleaned off the boat before it can be used again."

In the Old World countries, eels have been and still are regarded as a great delicacy, whether

broiled, fried, pickled, smoked, or otherwise prepared. They're even grown in special ponds for table use, and in some of the fanciest restaurants, kept alive in glass tanks for the gourmet's selection. Italians make a special Christmas Eve dish from them. Eel tidbits precede fine dinners in France as hors d'oeuvres, and they can be purchased in delicatessens and game stores throughout Europe. Unless they're already cooked, they're offered to the customer alive.

Eels have lost out in popularity in the States, however. Apparently the snake-like appearance is too much for the modern housewife.

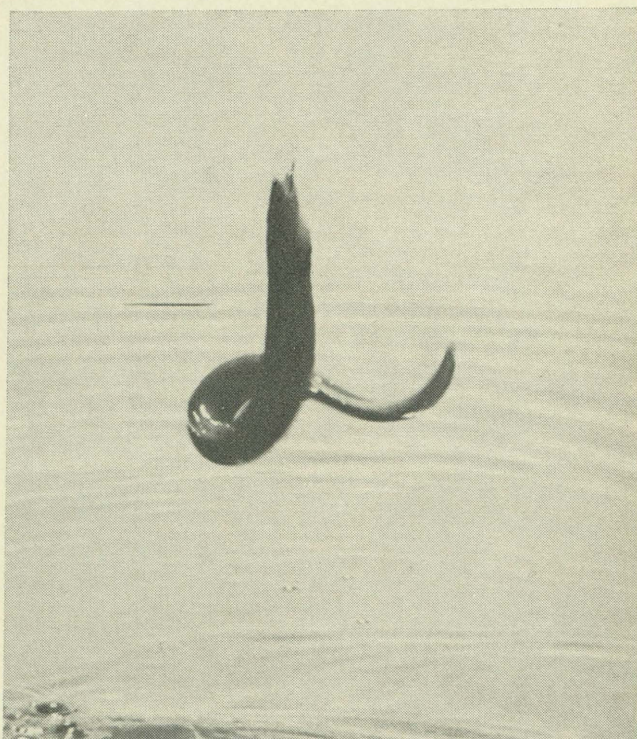
I've eaten the few I've caught but don't recall that they were anything special enough to make me want to go eel fishing the next day. The meat is white, firm, sweet, and rich, however.

And they clean easily. A shallow slice around the body behind the gills, a steady pull with a pair of pliers, and the skin peels off like a finger out of a glove.

Eels and eelskins make fine striped bass lures and I've heard that young eels can entice any Florida bass into striking. Trouble is, there are many critters called "eels" in Florida. However, if they work as well for bass as the narrow-striped dwarf sirens taken from the Brooksville area which are related to the salamanders but which are erroneously called "eels"—I can readily vouch for them.

In the early 1900's eelskins were frequently used in the manufacture of buggy whips.

While these ocean travellers may not be the prettiest or most useful fish in Florida waters, you must at least give them credit for having one of the most interesting backgrounds. ●



Eels are voracious feeders and easily caught on hook and line. Worms and crawdads are often used as bait. Despite their snake-like appearance, eels are very good to eat.



a friend of the farmer and
gardener, the screech owl
consumes both rodents and
insects in great numbers

THE SCREECH OWL

By GENE SMITH

SUPERSTITIOUS FOLK attribute weird powers to the screech owl, *Otus asio*, a small, typical owl found throughout the country.

In the Southland its quavering, spine-chilling call is said by some to be a harbinger of death. But, for superstitious problems there always seem to be plenty of superstitious solutions. The left shoe turned upside down beneath the bed is supposed to silence the dread messenger, thereby assuring untroubled rest. So is the left trouser pocket turned inside out.

As owls go, there actually is very little that is unusual about the tiny screech owl—also called “scrooch owl,” “squinch owl,” and, the most accurately descriptive name of all, “shivering owl.”

Even its eerie voice is not really a screech, as advertised, but a mournful whistle with lots of *vibrato*—and guaranteed to keep camping cub scouts—and most den mothers—wide awake for hours!

The screech owl is our only *small* owl with “ears,” that is, tufts of feathers atop his head that resemble ears or horns. This makes it easily identified. It measures only 8 to 10 inches high and, in the eastern United States, comes in two colors: reddish brown and gray. This is possibly the screech owl’s greatest legitimate claim to fame. The odd two-color condition, known as *dichromatism*, means it occurs in a given species irrespective of sex, age or season. The screech owl presents

one of the best examples of dichromatism found in nature.

In the reddish brown phase this owl is uniformly rufous above while the breast and flanks are lighter and barred with black and gray. The belly is white and the wing linings are pale buffy.

In the gray phase it is ash colored all over—about the shade of white oak bark.

In both color phases the iris is yellow, the shanks are feathered and the toes are bristled—looking much like pipe cleaners—clear to the claws. The neat, ringed face, with its short bill and fixed, wide-set eyes, gives the screech owl its typically stoic expression.

Screech owls nest and roost wherever hollows are available—from 3 to 80 feet above ground. They favor old woodpecker holes but also live in barn eaves and little used outbuildings around a farm. Too, they take readily to bird houses if situated near good hunting areas, such as fields or orchards, which usually harbor a good supply of mice and insects, primary screech owl fare. (The immense value of these nocturnal hunters to the farmer is absolutely indisputable.)

Three eggs is the usual number in a screech owl's nest, but 2 to 4 are sometimes found; rarely, 5. They are white, like most owls' eggs. The young are covered with soft white down, but, oddly, as the plumage appears, both colors may be represented in the same nest!

The screech owl chooses a roosting hollow with a very small opening—no larger than 3 to 5 inches across. During the day it habitually sits at the opening dozing the hours away. But at the slightest disturbance it quickly and silently sinks from view. If the opening is observed in silence for a bit the little owl will likely reappear.

How does one locate a roosting hollow? Biologists look for owl pellets, small wads of hair and bone these birds regurgitate and “cast” beneath their roosts from time to time. These pellets, which are also cast by hawks and eagles, are composed of the undigestible parts of their prey—teeth, bone, hair and claws. They are usually compact enough to survive a fall from considerable height intact.

The pellets, collected from a known species, give an accurate record of the feeding habits of that bird of prey. It is simple for the trained researcher to separate and identify the various materials as to their sources—mouse skulls, jawbones and teeth,

Despite his ominous, quavering note, the screech owl should be encouraged, not feared or shunned. He will destroy vast numbers of rats and mice—and insects as well! Roosting hollows should be preserved around the farm or garden. Well placed bird houses are accepted readily by these tiny owls, and used year after year.

grasshopper legs, mole fur, frog and bird bones, etc. These items regularly occur in screech owl pellets, with mice providing the bulk by far. The diet also includes lizards, wood and water rats, crawfish and a few small birds, mostly sparrows.

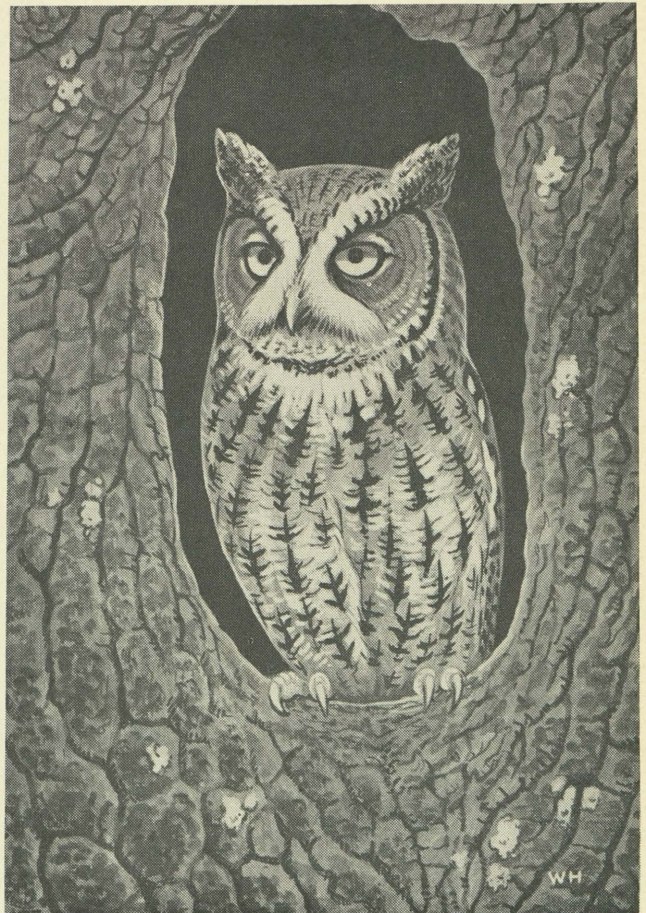
Screech owls hunt in two ways, always after dark: by “coursing,” that is, flying at low levels over a field or through wooded areas looking for prey with their extremely sharp eyes; or by still hunting from a low perch—a fence post, tree or haystack. When a prey animal is spotted the silent hunter strikes, grasping its intended meal with its sharp, death-dealing talons and returning to its perch to swallow the item whole, if possible. Larger rats and similar prey must first be dismembered, of course.

The screech owl has natural enemies, too. Where the great horned owl hunts, the beaks and bones of the screech owl often turn up in *its* pellets! Also, bobcats, housecats and foxes take some screech owls on the ground, where they sometimes become too preoccupied with subduing their own prey and fail to notice approaching danger.

Young screech owls tame quite easily but make terribly dull pets. They do no tricks; they show no affection; they offer no cheer. They just sit around . . . moping . . . and staring . . . seeming to know something dreadful but not daring to tell.

Naw, it couldn't be. . . . ●

Drawings By Wallace Hughes





Photos By John Fix

LITTLE ISLE of HISTORY

By JOHN FIX

**one of the islands in sight from the highway heading south,
through the Florida Keys, has a long and bloody history**

THERE ARE FEW motorists who drive to south Florida and fail to include in their itinerary a visit to Key West. For the 150-mile journey from Miami to this southernmost city in continental United States is a delightful one, with the highway (U.S. No. 1) making a series of giant leaps from island to island, and tracing the route of the old Flagler railroad which was blown into the sea by the vicious hurricane of 1935.

There are other islands to the east and west of those the highway touches. Together they make up the fabulous Florida Keys and while each appears an identical green jewel in a viridian sea, one of the islands within plain view of the highway—and generally passed by without notice—has a long and bloody history. That island is 11-acre Indian Key, 70 miles south of Miami.

Historically, Indian Key was first blood-spattered 300 years ago when fierce Calusa Indians rounded up 400 French survivors of a shipwreck and murdered them *en masse* on the island. Because of this, Indian Key is identified on old Spanish maps

and in old Spanish chronicles as "Matanzas," The Massacres.

About 1695 a Spaniard named Antonio Gomez established a thriving trading post on Indian Key. Later, because of the magnificent channel adjoining it, the island became a lair for pirates making hit-and-run forays on treasure laden galleons plying the nearby Florida Straits.

When the last pirate had swung from a yardarm or been sent fleeing to Caribbean waters, there followed a peaceful period during which Indian Key dozed in the sun and a jungle crept silently over the island obliterating all traces of Indian encampments, trading posts and the ramshackle dwellings of the buccaneers.

Then in 1823, two men named Fletcher and Price took up residency on Indian Key and obtaining ownership by squatter's rights sold it in 1825 to Jacob Houseman. And with Houseman begins the last bloody episode in the history of the ill-fated little island.

Jacob Houseman was a native of New York. One sunny day in the early 1820's he stole a schooner belonging to his father and headed for the West Indies, hoping to make his fortune. The schooner went aground in the Florida Straits. It was floated and taken to Key West for repairs.

Key West at that time was the wealthiest city per capita in the territory of Florida. Its residents to a man were up to their chin whiskers in the lucrative business of salvaging cargo from ships that—some rumored not altogether by chance—foundered on the rocks off their shores. Houseman, young and strong and ambitious, was entranced by the scene and the long-range opportunities it offered for the less-than-scrupulous. He abandoned his plans for the West Indies venture and when his boat was repaired he became a full-time wrecker.

One day Houseman came upon a French brig which was pounding to pieces near Elliot Key. He salvaged the ship's valuable cargo of cochineal and logwood and took it to St. Augustine for adjudication, instead of to Key West which was legally proper. This flaunting of the law made bitter enemies for Houseman at Key West. Thereafter he threw caution to the trade winds and engaged in a number of openly shady operations. It was from one of these—a proven conspiracy between him and the master of a wrecked brig—that he acquired the \$30,000 to buy Indian Key and set up his island empire.

All that remains, left, of once extensive buildings on Indian Key. The sharp-pointed hemp plants are the descendants of those brought from Yucatan by Doctor Perrine. Indian Key, below, seen from U.S. Highway 1.

Houseman cleared the island and hauled in top soil. He planted trees and shrubs. He laid out streets and walkways. He built a large warehouse, a trading post, dwellings, a palatial residence for himself and a hotel which he named "The Tropical."

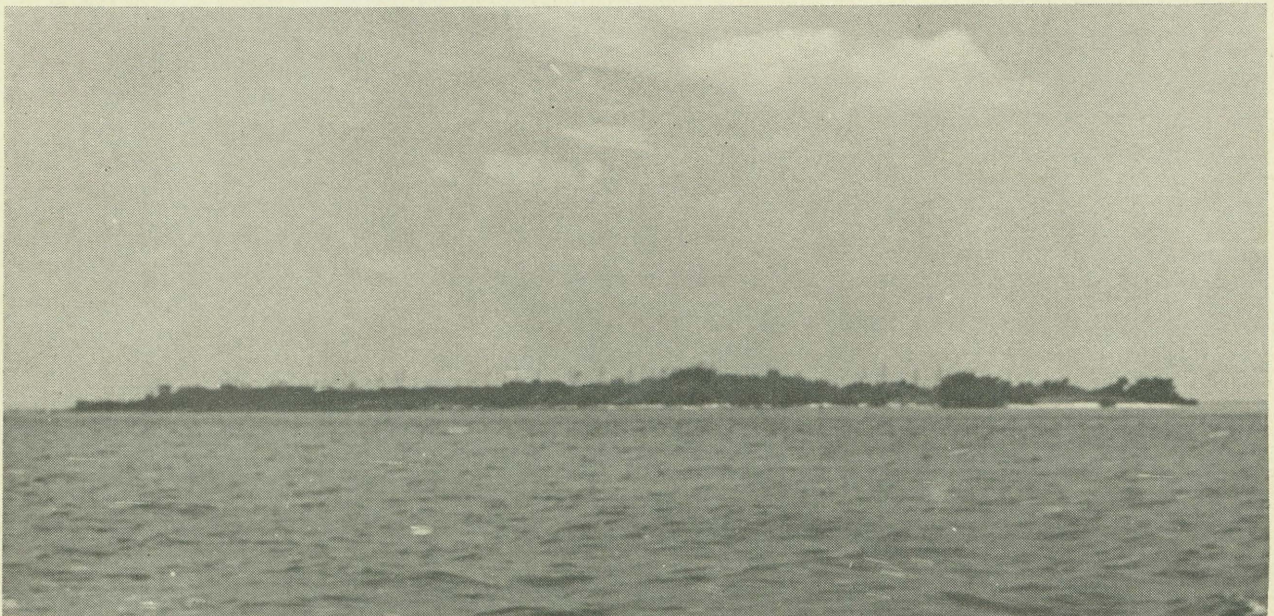
On the north shore of the island, adjoining Indian Key's fine channel, he constructed two spacious docks. Houseman's salvage operations had now become big business and Indian Key a mecca for wreckers from as far north as New River which is now Fort Lauderdale. There was gambling at the hotel, lots of rum and—after Houseman had made a fast trip to Charleston—lots of girls. One of the latter, named Elizabeth Ann, became Houseman's common law wife. The Government assigned a postmaster to Indian Key and a deputy collector of customs.

Jacob Houseman was now a man of consequence. He used his influence with the Territorial Legislative Council (Florida didn't become a State until 1845) and in 1836 a new county was created; Dade County, with Indian Key as the county seat. (The county seat of populous Dade County today is Miami.) Houseman was king of the new county, Dade County's first political boss.

But there was a cloud on the Indian Key horizon—a menacing red cloud—as the Indians of the area became increasingly restless. Houseman, concerned, attempted to persuade the U.S. Navy to fortify Indian Key instead of adjacent uninhabited Tea Table Key. Failing in this, he organized the slaves and white men of his island into a militia.

In 1838 a gentleman of science arrived to take up residence on Indian Key. He was Doctor Henry Perrine, a physician who had spent 12 years as American consul at Campeche, Yucatan, Mexico.

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Dr. Perrine had become expert in the useful tropical plants of the Yucatan Peninsula and believed such plants might be adapted to American use. He set up a plant experimental station on Indian Key, with the intention of later transferring it to a government land grant at Cape Sable when the latter was safe for occupancy. Dr. Perrine was joined at Indian Key by his wife and three children who had been living in New York.

Jacob Houseman, like most uneducated men, was greatly impressed by intellectuality and he welcomed Dr. Perrine to the island. Perrine set out his plants, principally the valuable hemp plant, *Agave sisalana*, the basic ingredient of the Yucatan hemp industry, in planting boxes for later removal to Cape Sable.

Meanwhile, Houseman had again run afoul of the law and this time his Master Wrecker's certificate was revoked by Judge James Webb of the U.S. Superior Court. Houseman was unable to work in any jurisdiction. His wings clipped and accustomed to living high, he became desperate for money. Soon he came up with the audacious scheme that was to touch off the final tragedy on Indian Key. He asked the Territorial Legislative Council to pay him \$200 for each Indian he killed. The Council tried to get the congressional representative of Florida in Congress to urge the President to agree to House-

man's proposal but the suggestion was never acted upon.

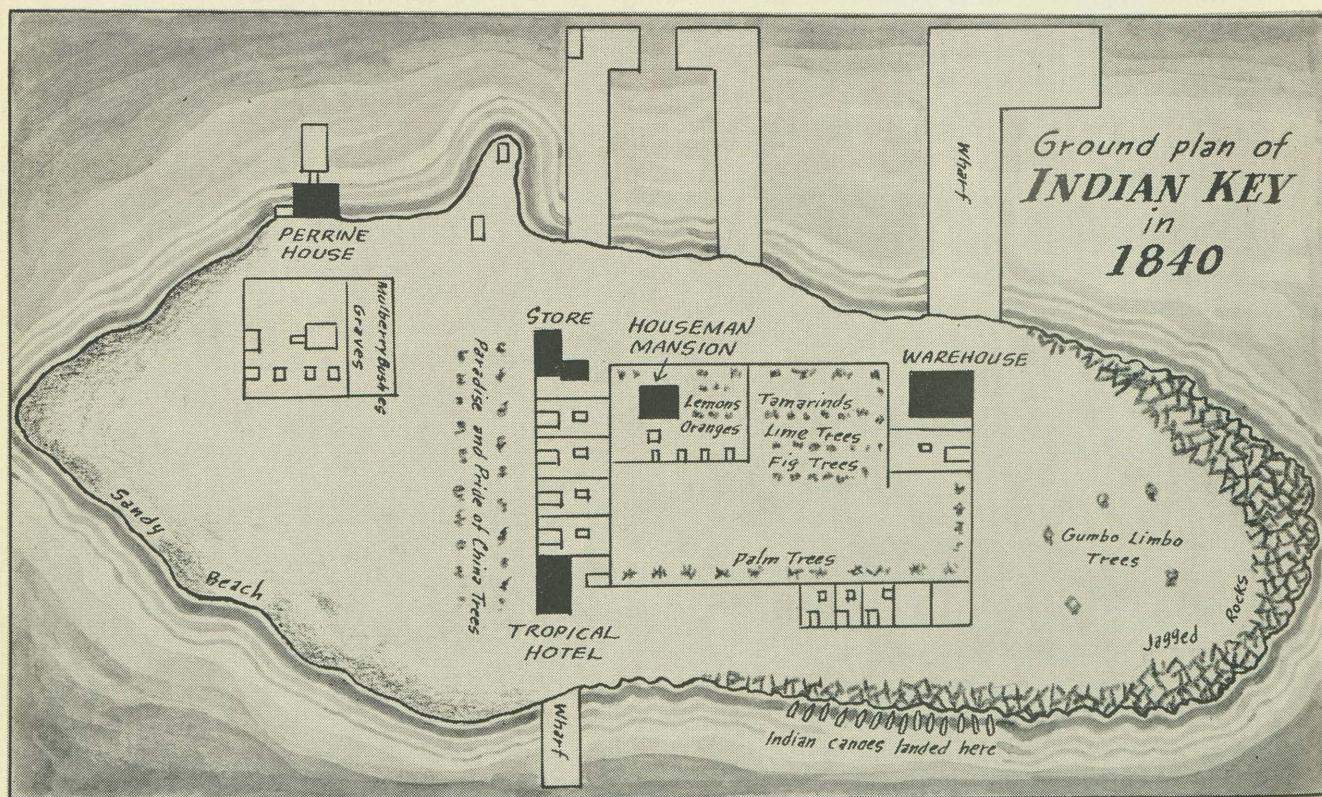
The hostile Indians of the region were Seminoles. They were a motley grouping, mostly of Creek extraction but with a strong infusion of renegade white and escaped Negro slave. The Seminoles quickly learned of Houseman's proposal and the result was inevitable. In revenge—as well as for the valuable stores, guns and ammunition on Indian Key—they struck, 130-strong, just before dawn on August 7, 1840, murdered most of the residents of Indian Key and plundered and set fire to its buildings. Houseman escaped; so did the family of Dr. Perrine. Dr. Perrine was among those killed.

Over a hundred years have passed. Indian Key today is uninhabited and has once more reverted to jungle. From the highway you can see stalks of the hemp plants, descendants of those Doctor Perrine cultivated but which he was never able to remove to Cape Sable.

And if you should meet up with a friend with a boat, and are able to bridge the short gap from the highway to the island, part the heavy tropical growth and see the remains of Houseman's empire; the rock cisterns, the foundations of the warehouses, hotel, shops, dwelling and gun emplacements.

And if you scratch below them, deeper into the dust of centuries, perhaps you will come upon remnants of the savage Calusas and—who knows—maybe even a hastily abandoned Spanish doubloon or two! ●

The historical marker on U.S. Highway 1, opposite Indian Key, gives no hint of history after 1695 establishment.



Who Owns The Game?

By ERNEST SWIFT

National Wildlife Federation

AUTHORITY OF THE STATES to manage and control all resident game and fish within their borders, as well as claim title to the same, is again being challenged by the Federal government. This time it is by the Secretary of Interior regarding all wildlife species within the borders of Federal lands, and especially under the jurisdiction of the Department of Interior.

To the rising generation of young American sportsmen this may come as a new and startling usurpation of authority, having grown up with the snug theory that all resident game belongs to the state wherein it resides. But this issue has a long history of contention, going back at least fifty years. This challenge was responsible for the Migratory Bird Treaty Act with Great Britain and later with Mexico, thereby bringing to bear the treaty powers of the U. S. Constitution.

This challenge was again made by Secretary of Agriculture Henry Wallace during the depression years when he was going to set seasons and bag limits on the National Forests, issue permits for hunting, and charge for them under the one-time famous order G. 20-A.

This order of Mr. Wallace threatening the rights of the several states to manage their own game, made the International Association of Game, Fish and Conservation Commissioners grow up over night and put on long pants. Under the able leadership of Seth Gordon, then Director of the Pennsylvania Game Commission and President of the International, the states gave Mr. Wallace such a rough time that he beat a hasty and not too dignified retreat.

For years this Federal versus States issue over who has title to wild game has smoldered under a cover of cold looking ashes, but the coals have never been extinguished. It appears as if those forces wishing to see the Federal government take over such jurisdiction have simply been laying back waiting to again fan the flames. To them the time seems ripe with more courts looking with favor on increased Federal controls and with an increasing number of landless people beginning to frown on hunting as a form of outdoor recreation and an age-old tradition of the American way of life.

But the implications are far deeper than appear on the surface. The first step would be to destroy title of the several states to the game residing on

This article, and others that will appear in the next several issues, were prepared by Ernest F. Swift shortly before July 24, 1968, when he passed away at Rice Lake, Wisconsin.



Photo By Leonard Lee Rue III

The states must continually defend their right to ownership of native fish and game. Killing of deer by National Park personnel for study purposes, but in direct violation of a state game law, prompted current court battle over ownership.

Federal lands within the boundaries of the states. This would quickly erode the power to finance state conservation operations through reduced license fees, especially in many of the western states where public land ownership is as high as 80%. In the eastern states this impact would not be so quickly apparent. However, the second step in wildlife ownership would be to pass legislation so that landowners could acquire title to game and fish on their lands or abutting waterways as is now and has been traditional in Europe for centuries.

This drive for landowners to obtain title to game and fish on their own lands has been a declared purpose of some agencies and organizations. If not formally documented, it has been so stated in speeches by their representatives.

So the timetable as contemplated by some of our Federally minded politicians, bureaucrats and those who see wrong in hunting and fishing under the present system, is to destroy the state conservation agencies by drying up their source of revenues and next giving title to resident game to the Federal government on Federal lands and to private owners on their respective lands. In many states east of the Mississippi, hunting on private lands constitutes the bulk of that recreation as some states have little land of their own.

This is something for all state conservation officials.
(Continued on next page)



Photo By Lovett Williams

Mr. Average Citizen-Hunter is caught in a squeeze. Private landowners as well as Federal government want ownership of native wildlife on their property. It is this type system that has strangled public hunting in Europe for centuries.

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cials, game wardens, game and fish biologists and even state foresters to think about, let alone Mr. Average Citizen and Hunter who for generations has been able to hunt on lands leased by his state, on Federal lands or by permission on private lands under the game seasons and license laws of his own state.

If the title of game finally goes to the individual landowners, the hunter may find himself checking on and off each farm and paying the landowner for each grouse, partridge, rabbit or deer that he shoots. He may have to do the same on Federal lands. The trapper may have to pay a percentage of his muskrat, mink and beaver take if his traps are staked on lands or water where private ownership is claimed. Such prophecies are not a silly exercise of unrealities; they could eventually become haunting facts.

The immediate case in issue resulted from the National Park employees killing some 15 deer in the Carlsbad Caverns National Park in New Mexico, and in direct violation of the laws of that state. The deer were shot as part of a research project. They were shot, their stomachs removed and the carcasses left to rot. Offers by the New Mexico officials to assist in the study and to issue collecting permits

An increasingly important and popular game animal is the feral hog—a domestic swine living in the wild. Once the state acquires ownership of hogs, as provided by law, they are regulated and managed like native game. This has become a fairly new concept in Florida.

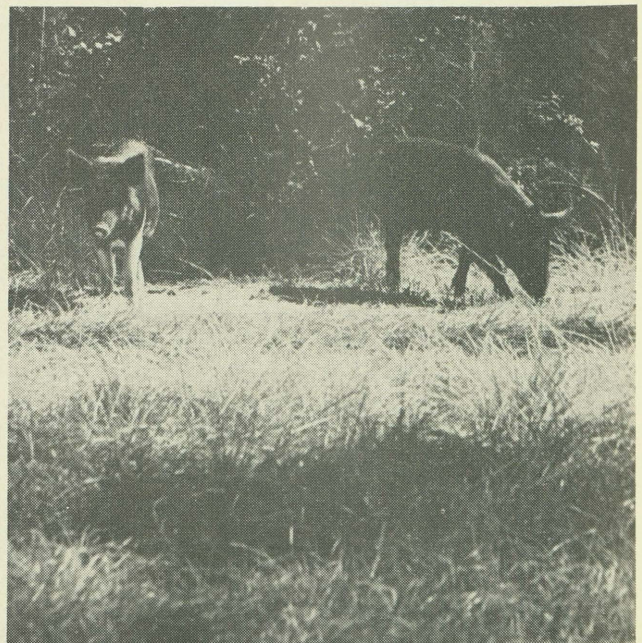
according to the laws of New Mexico were refused (let us say scorned) by the Park Service.

For at least three decades there has been a trend by some Federal courts and bureaus to diminish the powers of the states in both their social and commercial behavior, as well as advocating and attempting to assume jurisdiction of all resources on public lands, especially wildlife. Sadly enough this has come about in some instances because the states have sometimes failed to live up to their responsibilities, to pass constructive legislation and to make compacts among themselves.

In the case of water pollution many an honest "state-righter" has been forced to seek improvements through application of uniform laws passed by the U. S. Congress; but any failures on the part of the states in eliminating pollution has no bearing on the case in question. There is a growing arrogance that only the people representing the Federal government have the intelligence, integrity and know-how to steer the resource ship. They believe they are among the few of God's anointed that can plan and make no mistakes, that they alone sit on the right hand of Jehovah.

A Federal District Court judge recently ruled in favor of New Mexico, but the decision is expected to be appealed. The National Wildlife Federation has announced that it will intervene as a "friend of the court," if necessary, in this current court case to decide legal ownership of wildlife.

Thomas L. Kimball, Executive Director of the National Wildlife Federation has stated: "If the Federal government's claim to legal jurisdiction over resident game and fish prevails, then private landowners could conceivably claim a similar right—such a doctrine would lead to complete chaos and confusion in the protection, management and restoration of America's fish and wildlife resources." ●



Muzzle Flashes

HUNTING

the new gun and ammunition regulations now in effect will create continued hardships for the many law-abiding sportsmen who enjoy hunting sports

By EDMUND McLAURIN



THE NATIONAL GUN and ammunition control Bill, effective December 16, 1968, tied in with pistol purchase and pistol ammunition legislation passed last June (with the same effective December 16 date), will surely work hardship on law-abiding sportsmen who hunt and who like to shoot at a variety of inanimate targets.

The legislation puts a firm lid on direct purchases of firearms and ammunition by mail order, and even prohibits a sportsman from purchasing such items in another state, while on business or vacation trip, and bringing needed and hard to find equipment back home.

In addition, all reloading components and propellant powders are barred from interstate sales, except between Federal licensed dealers and manufacturers.

Purchases, of course, still can be made over the counter in resident state—after applicable red tape in existence is patiently endured, and you can prove age eligibility.

Under the new Federal law, if you are under 18 years of age, or affected by some existing state or local law, you cannot now purchase a firearm or ammunition of any kind, even if you are a bona fide resident seeking over-the-counter purchase from a resident, licensed dealer.

The law prohibits sale in all 50 states of *all rifles and shotguns and ammunition to persons under 18 years of age, and handguns to anyone under 21*, whether by attempted mail-order or over-the-counter purchase. For those under 18, prohibited ammunition sales include even .22 caliber rimfire target and squirrel hunting ammunition.

Since—in Florida, at least—there is already a law (Fla. Statute 790.17) decreeing that no person can sell, barter, lend or give a firearm to a minor, unless said firearm is to be used strictly for hunting, shooters under 18 years of age are really being given tight squeeze. Both firearms and ammunition purchases are now cut off, by applicable Federal and state laws. The Federal law does not make exception for purchases by under age persons solely for intended hunting use.

As I view the situation, there will be nothing less than assorted chaos in the gun and ammunition consumer-purchase field for a long time!

Simply, it will take time for the provisions of the newly enacted Federal laws to become fully

understood by the retail trade and the buying public.

Next, it will also be necessary for national suppliers to activate new dealer distribution set-ups, so that local dealers can be assured of adequate firearms and ammunition stocks to meet legitimate consumer demands. This will take time to tangibly materialize.

Even before the legislation, factory deliveries of certain gun models were slow, what with the Vietnam war contracts and other priorities. For example, some sportsmen have already waited more than 18 months for delivery of ordered Smith & Wesson target handguns. Now, their wait will likely be extended. They won't likely be the only complainers, either.

It is impractical for the average sporting goods store to stock certain expensive gun models, or for-sale samples of custom made sporting firearms. The cash investment is simply too much to adopt policy of keeping in stock specialized gun models that hold price appeal only for the wealthy sportsman or discriminating gun-lover, who makes only an occasional firearm purchase.

In much the same vein, the average gun dealer cannot afford to regularly stock all calibers of ammunition; most wisely take care to keep on shelves those brands, calibers and gauges that see popular use.

Ammunition for such old and odd calibers as the .351 Winchester (autoloading), .219 Zipper, .45-70 Government, .45-90, .38-40 Winchester, .358 Winchester and certain foreign military calibers are not always to be found on local dealer shelves.

Heretofore, such odd listings could be consumer ordered from some national supplier or importer; now they cannot be so purchased. The local dealer will have to get them. It may take him considerable time to get delivery, even if he knows definite sources of supply. Also, unless ammunition is dealer ordered in bulk, ultimate delivered cost to both dealer and consumer is apt to be higher than formerly.

Further, when new rifle calibers are announced, the local dealer will immediately be in competition with both large and small rival firms for first production runs of the manufacturers.

Undoubtedly, the enacted national purchasing
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(Continued from preceding page)

restrictions will help local dealers by taking off them the former, irking competition and magazine sales pitches of mail-order rivals. But their direct benefit will be in proportion to how quickly and efficiently local dealers can make consumer delivery after getting the business on paper.

The restrictions will surely work great financial hardship on firms that heretofore have done more or less strictly mail-order business in the firearm and ammunition fields.

Familiar mail-order houses like Parker Distributors, Gander Mountain; Sears, Roebuck; Montgomery Ward; Williams Gun Sight Company; Simmons Gun Specialties; Klein's Sporting Goods; Century Arms; National Gun Traders; Hunter's Lodge; Sarco, and Walter G. Craig, Inc., will undeniably be hard hit by the clamp down on further acceptance of mail orders, or sales to non-residents of those states in which the named firms operate.

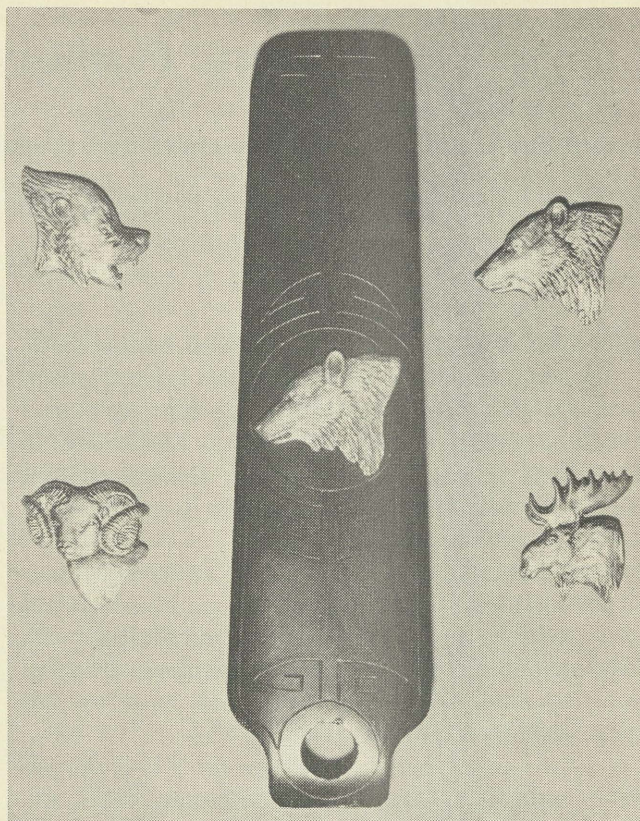
The imposed mail-order purchase and interstate shipment ban directly to consumers will also probably strike a death knell for special mail-order sales publications, like the long popular SHOTGUN NEWS. Personal gun sale ads will necessarily disappear from the classified columns of THE AMERICAN RIFLEMAN, GUN WEEK and other firearms publications; only advertisements directed to licensed dealers, or to consumer of home state address, will likely be seen.

You cannot even order a firearm by mail within your own state of residence without an accompanying affidavit certifying age and eligibility to purchase under existing state or local laws. There is also a seven day waiting period between receipt of order and attached affidavit, and the date an ordered gun can be delivered to the resident citizen.

The exception is where a hunting gun is lost or stolen and a replacement must be made without delay; in such instances, a sworn statement of incurred loss, plus other required information, must be filed. (The red tape is still there.)

What about small volume, out-of-state licensed gun dealers who visit Florida for two or three days to exhibit at one of the periodic gun collectors' conventions, or trade shows? Quite often in the past, these visiting dealers have brought with them gun models not always readily obtainable from dealers of the consumer's resident state. Will sportsmen still be able to purchase from these visiting dealers? (They could not if roles were reversed.)

As matters now stand, the one included exception is where a Federally-licensed dealer offers a rifle or shotgun sale to a resident of a contiguous state to the dealer's resident state, by personal contact, as can happen at a sponsored Gun Show or trade exhibit—provided that the purchaser's state has statute permitting such sale and, second, that the sale meets the requirements of firearms sales



Miniature sterling silver or gold game head overlays, now commercially available, are ideal for dressing up the guns.

in both the dealer's and purchaser's resident states. . . . Seem somewhat complicated? It is!

The new Federal Law does provide for interstate shipment of a firearm by a licensed dealer to a manufacturer or custom gunsmith for repair or customizing.

Even so, those handling gun repair work won't find transactions easy. There will surely be a lot of extra paper work.

Few custom gunsmiths are letter writers. The custom gunsmithing phase of gun sales is certain to be more complex and more liable to human error and misunderstanding by gunsmith, middleman and consumer!

The new Federal regulations now make it impossible for gunsmiths to ship direct to consumer via interstate commerce, a reading of the legal texts seems to indicate. Custom gunsmithing is so highly specialized and of such individual customer whim that the average local sporting goods dealer won't get much pleasure or profit from the transaction as go-between.

What will happen to slow-process custom gunsmithing work long ago ordered direct by consumer, with accompanying good-faith deposits or even advance full payment? How will the finished work eventually reach a consumer in a different state, since he is now barred from receiving interstate shipment? If the custom gunsmith arranges for legal shipment to a locally licensed dealer, he must

now make contact and presumably pay some sort of commission.

What handling will be given mail-ordered guns or ammunition ordered and paid for prior to the effective date of the Federal ban, but not shipped? The national brand name firearms and ammunition manufacturers can eventually ship to their licensed, franchised dealers, but how will the independent national supplier, without local community dealerships, and formerly doing business solely by mail, effect consumer deliveries of orders of long standing?

Frankly, I don't know. Possibly the new Federal laws will be legally interpreted by our judicial system in such legal definition as will provide for such specific exceptions, but I won't bet on it.

Despite several careful readings of the new laws, as passed by Congress and sent on to me by one of the Florida senators, I cannot find anything applicable to the described instances.

However, it is quite likely that the new laws will see challenge in the courts, with the hoped for possibility that their unduly restrictive provisions will be declared unconstitutional.

But for some months, at least, the gun and ammunition sales situation is going to be in turbulent confusion. Fortunate are those who already have a good hunting or target firearm and a little ammunition for it!

The saddest part is that it is highly probable that the enacted legislation will not result in any hoped for decrease in crime. The real hurt—as with most other firearms legislation—will be felt by law-abiding sportsmen, whose tax money not only goes to combat crime but for many other worthwhile public programs.

FOR YEARS I have been on constant watch for quality decorations that can be used to dress-up gun receivers, stocks and fore-ends.

I have been particularly interested in obtaining small solid gold or sterling silver game or game bird figures that might be judiciously inlaid in gun stock or soldered to the sides of receiver. Most of the commercial decorations seen have been rather crudely executed, and invariably I have passed them up.

Game head overlays made by Sid Bell, R.D. #2, Tully, New York 13159, can be declared highly satisfactory. Bell produces very well executed miniature heads of game, such as bear, moose, big horn sheep, deer and elk, by molten-metal casting. The finished decorations have a hollow lug that permits attachment to metal floor plate of bolt-action rifle or inletting into wood of rifle stock or handgun grips. Simple mounting instructions are included.

The sterling silver game heads are very attractive on the sides of metal receivers, and especially so when combined with a sterling silver (plain or engraved) grip-cap, obtainable from Pachmayr Gun

Works, 1220 So. Grand Avenue, Los Angeles, California 90015.

The Pachmayr pistol grip caps, used alone or in conjunction with other attempted stock or receiver decoration, add much to rifle or shotgun of pistol grip style.

The caps are made of satin-finished black plastic ovals, with center routed out to receive oval plate of gun owner's choice of sterling silver, nickel silver, 10K gold-filled, bronze, gold color anodized aluminum or stainless steel. The metal inserts are cemented into place after the black plastic housing has been shaped with a fine file to the contours of the pistol grip cap, and screwed into place.

With the exception of the stainless steel plate, all the metal ovals can be engraved with monogram by Pachmayr, or by any jeweler.

GOOD NEWS to shooters on the Florida scene is that a five-man team of shotgunners of the Skyway Rod & Gun Club, St. Petersburg, now holds the current Winchester Claybird Tournament Championship title, decided in late October of each year during a week of final round competition of Regional Champions, in the Bahamas.

The St. Petersburg club team scored a total of 1,911 hits out of a possible 2,000 shots fired at conventional clay pigeons, on combined trap and skeet courses. Runner-up was the White Wing Shooting Club, of Pasadena, Texas, with a team score of $1,881 \times 2000$ —30 fewer hits than the winning Florida team.

Five teams, each representing one of four geographical areas of the United States, along with a team from Canada, competed in the finals. Each competing team had defeated all rivals in its own region for the privilege of being flown, all expenses paid, to the Bahamas for the Grand Championship Tournament. Members of each Regional Championship team received a matched set of deluxe grade Winchester trap and skeet guns.

Previously held local level competition had determined each team's personnel—five shooters of different classes of shooting skills, chosen by feeding fired scores into a national average computer.

In the Bahamas competition, the marksmen individually fired 200 shots at trap and 200 at skeet, for a team total of 2,000 fired shots.

In compiling its final Grand Championship score of 1,911 hits the Skyway Rod & Gun Club team set a tournament record, one that officials feel will likely stand for some time. The Skyway Club team took an early lead the first day of the tournament and kept it.

The Skyway Rod & Gun Club did not enter the first Winchester Claybird Tournament, held in 1966, but did enter last year, winning a Regional Championship and placing third in the Bahamas finals. This year it went full stretch. ●



Blue Sea Cookbook

UNTIL RECENTLY the enjoyment of fish delicacies has been confined mainly to the coastal regions of the United States. Now, however, the advent of freezing and rapid air transportation, the delights of seafood have been made available to all parts of the country. Everybody can now enjoy lobster from Maine, Dungeness crabs from Puget Sound, Pompano and Red Snapper from Florida, and all the marvelous Blue Sea offerings that can make menus so varied and interesting.

Sarah D. Alberson, in her new book *THE BLUE SEA COOKBOOK*, gives us succulent recipes and formulas for the preparation of every type of fish and other sea foods. She includes complicated menus and painstaking creations that will evoke cheers for the chef, as well as simpler recipes and hints especially for the novice to the kitchen or to sea food cookery.

It should be noted that the title of Mrs. Alberson's book is somewhat of a misnomer, as she also includes in it mouthwatering recipes for all types of fresh water fish such as catfish, bass, pickerel, etc. Also included are directions and hints concerning the preparation of canned fish and shellfish.

It is a real delight for the cook to have all of the information easily available in *THE BLUE SEA COOKBOOK* in such a usable format. Virtually everything which one would want to know about fish is included here: information on its nutritive values; a guide to

CONSERVATION SCENE

what to look for when buying; instructions on how to clean, dress and prepare all types; methods of baking, barbecuing, frying and broiling; the preparation of tasty casseroles, salads, snacks and sandwiches. This is just a partial list of the wealth of information contained in this encyclopedically informative volume.

Mrs. Alberson is a professional Home Economist, and is Home Service Director for the Florida Gas Company. She appears regularly on TV and radio, and lectures to club groups and cooking schools. She has thousands of cooking hints and suggestions, but those concerning the use of seafoods are special favorites of hers. She is a native of Georgia, but she and her husband now make their home in Orlando.

Check with your bookstore about this 290 page, illustrated publication from Hastings House, Publishers, Inc., for \$8.95.

Tropical Trees

FRANKINCENSE and myrrh are pretty hard to get during Christmas season, but Florida's gumbo-limbo tree has been filling in as a substitute for centuries.

Florida State Parks Chief Naturalist Carol Beck said Indians and early Spaniards used the gum resin from gumbo-limbo as in-

cense in religious ceremonies, just as frankincense and myrrh resin was burned.

The two Biblical gums that have come to be associated with the Christmas story because the Wise Men brought them as gifts to the baby Jesus are from trees native to East Africa and Arabia.

Other Florida trees that are related to the frankincense and myrrh trees are tree-of-heaven, paradise tree, averadoa, and bay-cedar.

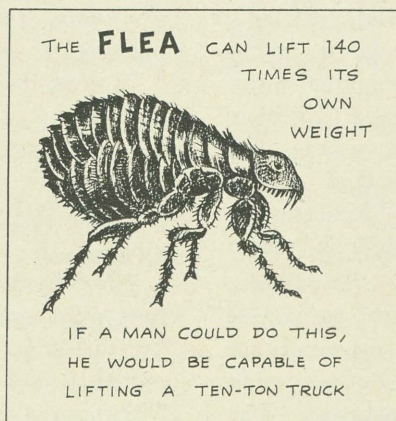
Miss Beck noted that the tropical gumbo-limbo trees may be seen in Jack Island State Park near Fort Pierce, Hugh Taylor Birch State Park in Fort Lauderdale, John Pennekamp Coral Reef State Park on Key Largo, Bahia Honda State Park on Bahia Honda Key, Long Key State Park on a key of the same name, and Collier-Seminole State Park near Naples.

The gumbo-limbo is a decorative tree, with red bark, feathery leaves, and bright red fruits. Miss Beck warned, however, that all Florida State Parks are plant and wildlife sanctuaries, so persons wanting to burn gumbo-limbo incense should not break the law by attempting to get resin from trees within state parks.

National Wildlife Week

THE URGENT NEED for the protection and development of wildlife habitat will be the theme for the 1969 observance of National Wildlife Week, scheduled for March 16-21, 1969. The National Wildlife Federation, sponsor of the observance in association with its affiliates in 49 states, has selected this slogan to remind Americans of the need for conservation: "Provide Habitat—Places Where Wildlife Live."

Thomas L. Kimball, executive director of the Federation, said that the "Provide Habitat" theme



was selected because of the constantly mounting threat to natural areas in all parts of the nation. Traditional wildlife areas are being damaged or destroyed through building expansion, water and air pollution, highway construction, and even modern agricultural practices.

"The presence of wildlife is one of the indicators of the quality of our environment," Kimball went on to say. "In areas where the natural landscape has not been damaged, animal populations have an opportunity to survive. However, where the land has been misused, wildlife probably cannot exist. If we can afford progress of this type, we also can afford some protection for our great wildlife heritage."

The Wildlife Week observance has been sponsored annually since 1938, when the event was launched by a proclamation by President Franklin D. Roosevelt. It is scheduled each year to include the first day of Spring and promotes a timely conservation issue or resources problem.

The National Wildlife Federation and its affiliates direct the observance in co-operation with citizen groups, public officials, youth organizations, public agencies, and nationwide press and radio-TV media.

Squirrels on the Move

SOUTHERN Appalachia's gray squirrels are on the move, and many have been seen swimming rivers and reservoirs, according to the Wildlife Management Institute. Within a recent month, for example, more than 50 squirrels have been rescued from Lake Allatoona, near Atlanta, by fishermen and Georgia conservation officers. The emigration at that point is southward, with squirrels apparently moving from the mountains into the Piedmont section. Hundreds of squirrels also have been killed on highways in the southeastern mountains and surrounding areas.

Although the causes of these



periodic emigrations are not well understood, mass movements of squirrels have been known since the early 1800's. Unlike lemmings that move together in great numbers in northern Europe, gray squirrels emigrate individually or in small groups and the movement may continue for several months. Also unlike the lemming, squirrel emigrations are not periodic and appear to occur randomly. All of the squirrels in any area do not emigrate.

The fall of 1967 was an exceptionally productive year for acorns, nuts, seeds, and fruits that are prime foods of the gray squirrel in the Southeast. Wildlife authorities believe this abundance of food contributed to a high survival of squirrels born in August and September litters of 1967 and to a subsequent large winter carry-over and good breeding success in 1968.

Maryland studies have shown that such overpopulations lead to internal social stress. Weaker members of the population move in an attempt to find areas where population density is less so their home territories will not infringe closely upon those of other squirrels. In past emigrations, gray squirrels have moved from areas where acorns and other mast were abundant, suggesting that internal population stress rather than food deficiencies was the primary

cause of emigration. Wildlife biologists agree that providing additional food, even if this could be done, only would intensify the problem.

Tennessee and Georgia have liberalized squirrel-hunting regulations to provide outdoor recreation and to put the animals to beneficial use.

DDT Moves With Waters

ONLY THREE DAYS after the Wisconsin village of Maple Bluff sprayed DDT to control Dutch elm disease, the state Department of Natural Resources detected a heavy concentration of the poison in Lake Mendota, the Wildlife Management Institute reports.

Runoff samples taken after a rain from a storm sewer and a ditch that empty into the lake revealed DDT concentrations ranging up to 225 parts per billion, which is many times the strength capable of killing aquatic insect larvae and fish. A sample taken at the same time near a village where DDT was not used showed only a .4 part per billion concentration of the poison.

Although DDT concentrations in runoff may be diluted after mixing with lake waters, they still present a hazard to many forms of life. This is because the minute amounts of the chemical that are ingested by larvae and small fish are retained in body tissues and build up to levels far greater than those found in the water. These small organisms are eaten by larger animals, with the poison eventually passing to ospreys, eagles, and fish where they again are concentrated in body tissues. As has been shown with the coho salmon in Lake Michigan, the higher concentrations of the poison reduce reproduction and cause death.

Faced with this new evidence about DDT, the Wisconsin Natural Resources Department is eyeing statutory revisions over the use of insecticides in Dutch elm disease control. ●

Fish Management Notes

THE COMMISSION has announced what may be the most significant development in Florida's fresh water fish management program in years: the survival and phenomenal growth of striped bass (*Roccus saxatilis*) introduced into inland waters.

Several September hook and line catches of stripers up to seven and five-eighths inches long from Lake Talquin, near Tallahassee, and seine catches by biologists from Lake Underhill, at Orlando, and Lake Hollingsworth, at Lakeland, are evidence that Florida may finally have "come through" with landlocked, non-reproducing striped bass populations. (See Fish Management Notes, FLORIDA WILDLIFE, May 1968 and August 1968.)

Records show that in June, 50,000 striper fingerlings were released in 6700-acre Lake Talquin Fish Management Area; 3300 in Lake Underhill Fish Management Area (150 acres); and 15,600 in Lake Hollingsworth (365 acres). All were hatched in early April in South Carolina and flown to Florida, where they were reared to fingerling size for stocking.

Since the accepted growth rate for striped bass was thought to have been no more than about seven inches in a full year, the largest Lake Talquin catch, achieved in less than six months, both shocked and delighted Commission fishery biologists.

Catches from all three of the widely separated bodies of water have been in the 6-to-7-inch class—and some had already been feeding on small threadfin and gizzard shad.

Fishermen catching small striped bass from either of these three lakes can assist the promising program by (1) measuring their catches, if possible, (2) returning them to the water, and (3) notifying the nearest Commission office of the date, location and length of each catch.

PARALLELING the Commission's fresh water striper report is the encouraging news that several of the striped bass stocked in the brackish waters of Choctawhatchee Bay, in northwest Florida, last June by the U. S. Fish and Wildlife Service also have been taken on hook and line. (See Fish Management Notes, September 1968.)

TECHNICAL PAPERS presented for publication by Fisheries Division members at the Southeastern Association of Game and Fish Commissioners meeting in Baltimore in October were:

"The State Conservation Agency as a Survey Organization" by Don W. Hayne, N. C. State University at Raleigh, F. G. Banks and J. W. Woods, Tallahassee.

"Results of the Compressed Air-Fluorescent Pigment Technique in Mass Marking Selected Warm Water Fishes" by Forrest J. Ware, Lakeland.



Photo By Gene Smith

This six-month old striped bass was caught from Lake Talquin, near Tallahassee, September 26, 1968 by Mrs. P. E. Draughon. It was the first striper catch from the lake examined by Commission biologists. Joe Blanchard, DeFuniak Springs, displays the "first" brought in, which measured 7½-inches in length.

"*Tilapia aurea* (Steindachner), A Rapidly Spreading Exotic in South Central Florida" by Jon Buntz and Charles S. Manooch, III, Lakeland.

David T. Cox, 26, a graduate of the University of Tennessee, Knoxville, was recently employed by the Commission as a fishery biologist and project leader of the Stream Investigations Project.

Cox, a native of Knoxville, received his B.S. from UT in 1966 and completed two years of graduate work toward his pending M.S. before joining the Commission fishery staff. His major course work as an undergraduate included invertebrate zoology, fresh water fishery biology, limnology, ecology and biological oceanography. His graduate studies were in the field of water pollution.

The objective of the Stream Investigations Project, approved under the Federal Aid in Fish and Wildlife Restoration Act (D-J), is to monitor changes in water chemistry, invertebrate organisms and fish populations in the Apalachicola and Suwannee rivers. Sampling is conducted regularly at permanent monitoring stations along these two important Florida waterways.

David and his wife, Judy, live at 792 California Street, Tallahassee. They have a son, Bryan, 16 months. ●

For that BIG ONE



that didn't

get away

ELIGIBILITY REQUIREMENTS SPECIES

LARGEMOUTH BASS

.....8 pounds or larger

CHAIN PICKEREL

.....4 pounds or larger

BLUEGILL (BREAM)

.....1 1/2 pounds or larger

SHELLCRACKER

.....2 pounds or larger

BLACK CRAPPIE

.....2 pounds or larger

RED BREAST

.....1 pound or larger

All fish must be taken from the fresh waters of the state of Florida, as defined by the Game and Fresh Water Fish Commission. Fish must be caught on conventional fishing tackle, with artificial or live bait, in the presence of at least one witness.

The catch must be weighed and recorded at a fishing camp or tackle store within the state by the owner, manager, or an authorized agent of the respective establishment.

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is available without charge, to any and all subscribers to Florida Wildlife Magazine, and their immediate families, who catch any of the fresh-water game fish of the prescribed species and size requirements. Citation, showing recorded date of the catch, will be mailed to the applicant upon receipt of the following application form that has been properly filled out and signed.

Only fishing citation applications received within 90 days from date of catch will be honored.

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The Editor, FLORIDA WILDLIFE

Date _____

Game & Fresh Water Fish Commission, Tallahassee, Fla.

Please send me the Florida Wildlife Fishing Citation with the inscribed data listed below:

Name (please print) _____

Address _____

City _____ State _____ Zip No. _____

Species _____ Weight _____ Length _____

Type of Tackle _____

Bait or Lure Used _____

Where Caught _____ in _____ County

Date Caught _____ Catch Witnessed By _____

Registered, Weighed By _____ At _____

Signature of Applicant _____

CUT OUT AND SAVE THIS APPLICATION BLANK



Chameleon (Anole)

Photo By Wallace Hughes

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